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Eastern Edition

# FARM AND FIRESIDE

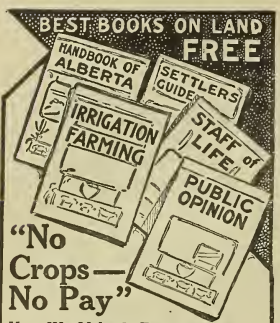
THE NATIONAL FARM PAPER

ESTABLISHED 1877 APRIL 10, 1911

# A Song for April

IT isn't raining rain to me,
It's raining daffodils;
In every dimpled drop I see
Wild flowers on the hills.
The clouds of gray engulf the day,
And overwhelm the town;
It isn't raining rain to me,
It's raining roses down.

It isn't raining rain to me,
But fields of clover bloom,
Where every bucaneering bee
May find a bed and room;
A health unto the happy!
A fig for him who frets!—
It isn't raining rain to me,
It's raining violets.—*Robert Loveman*

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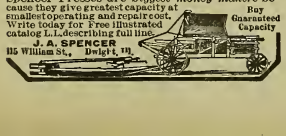


J. A. SPENCER
115 William St., Dwight, Ill.


# With the Editor

I HAVE a letter from a subscriber which seems to me a better "With the Editor" than I can write to-day. So this will be a "visit" in which I shall let someone else do most of the talking. I am doing this for the purpose of emphasizing the truth that our circulation and subscription departments are just as willing to do the right thing by everybody as is the editorial department. The writer of this letter used one of our coin-cards for remitting money. This was right, for Uncle Sam is usually a trustworthy messenger.

The coin was lost—as sometimes happens—and she, reasoning that publishers are hard-hearted creatures, did not feel that she could appeal to them. This was wrong; for there is no one connected with FARM AND FIRESIDE who would want her to bear the loss through sending money in the way we suggested,

Then she wrote me—this was right; for to my mind the matter of an injustice which takes sixty cents from a woman who feels the loss as did this friend, is no small matter—and no man's time is too precious to be used in righting a wrong. But here's the letter:

DEAR EDITOR:—When I wrote you a week or two ago I did not expect to weary you with another letter; but something so surprising and so pleasing occurred this afternoon that I must tell you about it. In the mail was a letter from the managing editor of the circulation department of FARM AND FIRESIDE. He tells me he got a letter from you telling of my sixty-cent subscription and its failure to reach its destination; also, that you "were positive I remitted, etc." Then they offer to make good my loss entire and send fifty Easter cards in place of the Christmas cards I paid for.

There were many surprises in all this, as I supposed my money and the paper also were hopelessly gone. If I had thought it would have done any good, I would have written the publishers about the matter first instead of bothering you with my trials and tribulations, but as publishers, like corporations, are not supposed to have any souls, I knew they would think I was trying to "get something for nothing." When I got the third circular and coin-card (after using the second one that came) I was *so mad* I just had to write you, because I knew that you would understand; and all (or at least some) of my other troubles, quite foreign to the case, crept in.

I fully realized your busy life, and many cares incident to the conduct of your paper, and many hundreds of your readers must write you of many things. How was I to guess that one hysterical letter, from an old overworked woman, would claim your attention enough to cause you to appeal to the publishers?

I did not dream of such a thing; but there is a sympathetic quality in your writings that makes your readers feel that they know you and that you are their friend.

We read a great deal about our noblest American in February, and although Lincoln's picture and yours are unlike as possible, I think you are very much alike in spirit and character. You know that with all the heavy burdens of the Civil War upon his mind and heart, he found time to see and help the humblest and poorest who appealed to him. I admire and reverence that trait in him, more than the strength and foresight he exhibited all through the dreadful war.

Two or three days ago FARM AND FIRESIDE for February 10th came, and it "looked good to us," we had not seen it for so long. When I asked my husband yesterday if he didn't want to read our paper with all last Tuesday's town elections in the county in it, he said: "No! I am reading this." He had FARM AND FIRESIDE, and was poring over the first half of it.

I always read the last half. On Page 37 I found the offer of FARM AND FIRESIDE with the *Housewife* for sixty cents. It said: "Remit by post-office money-order, etc.," and as that was sensible advice I decided to drop my old grudge, and save out enough "egg money" to send before twenty days were up.

Somehow I couldn't feel that I was right in harboring unpleasant thoughts against the paper which my husband and I have had so much confidence in and had become attached to.

I cannot write the publishers to-night, because the clock struck the hour for retiring before I began this, as bread had to be mixed for to-morrow's baking, and food prepared for to-morrow's breakfast, but I thought I would send a letter Monday telling them I was willing to bear part of the loss, and would send for the two papers and if they would send me the Easter cards I would be very grateful, as it was my eagerness to get the Christmas cards that caused me to send coin instead of waiting to get a money-order, as I knew I ought to do. I didn't have a Christmas card to send anyone; and received so many! Some from South Dakota, and from a dear friend who moved to Portland, Oregon.

That seems very far away to us New Yorkers.

I wish you could know how much I appreciate the trouble you took to write the publishers in my behalf. It was a small thing to make such a fuss about, but I had begun reading "Poor Relations" aloud to my husband and then I mailed it to a lady friend who had sent magazines to me. The manager (with an unreadable name) promised to send me the back numbers; I am afraid they will never be delivered if he does; our mail service is so poor.

But, all the same, that generous letter has made us "readers for life," when I thought in my disappointment, at first, I would never take it again, never!

We had taken FARM AND FIRESIDE two years when I renewed our subscription in December, so I would like to tell you how much we think it has improved since you became editor. The stories especially are of the best, a much higher grade than when we first subscribed. ALWAYS YOUR FRIEND.

THE moral to this is a double one. First, some of our readers are generously judging me according to what I want to do rather, I am afraid, than what I'm doing, which is very kind of them, and encourages me more than I can express. Secondly, some of them are not so sure as I wish they might be of the fact that there is no injustice too small to command the attention of any department of FARM AND FIRESIDE. What is greater than the just complaint of one who calls herself "A hysterical, overworked old woman?"

Herbert Quick

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ABOUT ADVERTISING

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Mention FARM AND FIRESIDE when you write to our advertisers, and we guarantee you fair and square treatment. Of course we do not undertake to adjust petty differences between subscribers and honest advertisers, but if any advertiser in this paper should defraud a subscriber, we stand ready to make good the loss incurred, provided we are notified within thirty days after the transaction.

FARM AND FIRESIDE is published on the 10th and 25th of each month. Copy for advertisements should be received twenty-five days in advance of publication date. $2.00 per agate line for both editions; $1.00 per agate line for the eastern or western edition singly. Eight words to the line, fourteen lines to the inch. Width of columns 2½ inches, length of columns two hundred lines. 5% discount for cash with order. Three lines is smallest space accepted.

# FARM AND FIRESIDE

PUBLISHED BY
THE CROWELL PUBLISHING COMPANY
SPRINGFIELD, OHIO
Branch Offices: 381 Fourth Avenue, New York City; Tribune Building, Chicago, Illinois
Copyright, 1911, by The Crowell Publishing Company
Entered at the Post-Office at Springfield, Ohio, as Second-Class Mail Matter

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Renew by accepting one of our offers before they are withdrawn.

SUBSCRIPTION PRICE

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Subscriptions and all editorial letters should be sent to the offices at Springfield, Ohio, and letters for the Editor should be marked "Editor."

Silver, when sent through the mails, should be carefully wrapped in cloth or strong paper so as not to wear a hole through the envelope.

Vol. XXXIV. No. 13 — Springfield, Ohio, April 10, 1911 — PUBLISHED SEMI-MONTHLY

Sharpen your wits with a file—of your farm papers.

No man ever filled his silo with a political machine.

Some big men never get too big to work a little farm.

No use to strike while the iron is hot unless you have a plan in mind.

Plant your corn in good season, in good ground—and be sure it's good seed-corn.

Depending on the hand of Providence is no excuse for letting your own grow soft.

To the optimist the good looks better than it is, and to the pessimist the bad looks worse than it is.

Meet the man who wants to "talk things over" with you a little more than half-way. "Going to law" over petty differences between neighbors is the worm that eats the heart out of peace and kills the tree of happiness.

When a man unburdens his mind to a refractory mule one is apt to wonder how any self-respecting mind could long have endured the burden anyway.

A farmer who is devoid of all public spirit, who has no interest outside of himself and his immediate own, may make a good living, but of what good is his living?

The manure pile is a part of the harvest, and the farmer who allows it to go to waste is as improvident as though he should permit any other part of his crop to rot in the field.

In a country where sheep are raised why not have a law that would require every dog running at large to be muzzled? It would not impair the usefulness of the dogs, and it would be a much-needed protection to the sheep.

## Robert Loveman's "Song"

WE PUBLISH on the cover of this issue the most joyous little poem written for a quarter of a century, Robert Loveman's "Song." It was first published under the title of "April Song" in the "Drawer" of *Harper's* in May, 1901. Since that time it has been included in a book of poems by Loveman called "The Gates of Silence and Other Poems," published by G. P. Putnam's Sons, and copyrighted in the name of the author. It has been called "The Rain Song," also, and has been set to music. It is clearly one of those poems which are immortal, like an ode of Collins or a song of Shelley or Shakespeare. On some depressing day read and memorize it, and absorb its truth and beauty.

## "Cook Pork Well"

FIFTEEN thousand persons have been made ill, and their cases recorded in medical history from eating raw or imperfectly cooked pork. Of these eight hundred and thirty have died.

The trichina or flesh-worm in pork is not inspected against by the government. No mode of inspection has yet been devised which can be depended upon. This parasite came into public notice about forty years ago and since then intelligent people have refused to eat raw pork.

But there are still those who need the admonition "Cook pork well," and so the United States government has issued a pamphlet on the subject. But all the average person needs to remember is the heading of this editorial and its relation to public health.

Deeding the farm over to the boys signs away your right to a home. Be the senior partner, not a farm derelict.

*Does your wife know that she can now get Farm and Fireside patterns from any one of the three offices: 381 Fourth Avenue, New York City; Springfield, Ohio, or 1538 California Street, Denver, Colorado; whichever is nearest? All of these offices of Farm and Fireside are equipped to fill hurry-up orders for patterns and she will save time by writing to the nearest one.*

It is the run-about dog that contracts hydrophobia or gathers disease or kills sheep. Where is your dog about midnight?

Few are as unfortunate as they think themselves to be, and few are as happy as others may imagine they are.

## Architecture No City Man's Monopoly

WHAT an artistic building! One would say that this cow-barn must have been built for some rich play-farmer after an expensive design by a high-class architect. As a matter of fact, it was planned by a farmer and built by cheap labor. It is on Joseph E. Wing's farm at Mechanicsburg, Ohio.

That beautiful masonry is made by putting small stones against the outside of the forms for the concrete, and shoveling in cement so thick that it did not run out against the forms. The result is a pretty rough-ashler effect. The barn cost a surprisingly small sum. How much better than the dry-goods-box effect so often seen.

## Crown Gall Contagious

NURSERYMEN have complained bitterly against inspection of nursery stock for crown gall. They have claimed that crown gall is not a contagious disease, nor half so injurious as the plant doctors say. Four people working together in the department at Washington seem to have proved after some thousands of experiments that the nurserymen are wrong and the plant doctors right. The crown gall is contagious. It is a bacterial disease. Its action is a good deal like cancer in animals, and the study of these experts may throw light on the mysteries of cancer.

Those nurserymen who have planted orchards of trees affected with crown gall, and who claim that the trees have done as well as healthy trees, need not be necessarily put down as untruthful. The fact is that if crown gall does not destroy the tree, the latter finally becomes immune. But it is still a source of contagion and should be destroyed. Score one more point for the energetic scientists of the Department of Agriculture.

There will be days when it seems as if nothing goes right—regular tinder-box days. That is the time to hang a weight on the safety-valve. Keep the upper hands of yourself or you cannot hold the mastery of anybody else.

Every good farmer has two farms, the real and the ideal. The ideal is always a little better than the real because when the real catches up with the past ideal there is created a new and better ideal. As soon as a man has attained in reality the best ideal he can create he comes to a standstill, and when a man gets to that point he begins to go backward. Keep pushing up your ideal and strive for it. Heaven is not half so far from earth as some people would have us believe.

There are young men who do not work, but the world is not proud of them. It does not know their names even; it simply speaks of them as "old-so-and-so's boy." Find out what you want to be and do, and take off your coat and make a dust in the world. The busier you are, the less harm you will be likely to get into, the sweeter will be your sleep, the brighter and happier your holidays, and the better satisfied will the world be with you.

## Another Fond Hope Blasted!

DOCTOR WILEY and a government "fermentation chemist"—whatever that is—have written a bulletin (No. 429) which punctures what is left of the denatured-alcohol bubble. In their conclusion they say that it takes a lot of money to go into the business, that a small plant won't pay, that dish-water, corn-stalks and the water the eggs were boiled in (and a lot of other trash the dreamers said would make alcohol) are "so poor in fermentable substance or so expensive to handle that their availability is thereby impaired," that it takes such valuable things as corn, potatoes and molasses as raw materials, and that large operations of a coöperative sort are the only ones that are likely to be successful, and that there are grave doubts about them while John D. Rockefeller's gasolene business lives and keeps its health. The conclusions are theirs, but the language is ours. We have suspected as much all along!

## Australian Milking System

IN THE daily consular and trade reports—perhaps the most interesting daily in America—there appears a note from a report of our vice-consul at Sydney on the use of milking-machines invented in Australia. "They are coming into quite general use," says the report. There are three makes of them, two made in Australia and one in New Zealand.

"I know," says Vice-Consul Baker, "of several records of over one hundred cows in less than two hours." The machines make milking easier, quicker and cleaner. They all work on the natural principle of suction and compression, in that respect copying the calf and following nature. Outfits for herds of twenty-five cows cost one hundred and eighty dollars in Sydney.

In the United States Patent Office may be seen descriptions of cheap hand milking-machines which we suspect worked on similar principles, and which under some tests showed great promise many years ago. We Americans, for all our mechanical expertness and inventiveness, may have left it to the Australians to perfect the machine which we left for the more impressive power machines—though there is nothing in the report to show that the Australian devices is not a power machine.

Anyhow, the subject is interesting. Milking-machines have not made good in America except in a limited way. If the Australasians have machines that will do so, ten million aching hands are waiting to bless them.

# The New Red School-House

## Bringing Rural Schooling Into Tune With Country Life—Three Experience-Letters

THAT we are approaching a time when our rural schools are to be changed cannot be doubted. Change is in the air. The change will be made by farmers, because they are the people who make the rural schools. The districts that study the question and move with the spirit of the age will be the ones which in twenty years will have the best homes, the best-tilled farms, and the neighborhoods in which the boys and girls will settle down and stay instead of going to the cities.

We are glad to publish on this page three letters from men who can speak from experience on the rural-school question. None of them, perhaps, presents the complete solution of the problem, but all of them offer facts observed first-hand—facts which bring the reader many steps nearer to the answer of the question: "What shall we do to make rural schooling a real preparation for rural life?"

### When Shall Instruction Begin?

By George P. Williams

IT IS evident that the special knowledge needed by the farmers of the future will be a scientific knowledge. The farmers of the past have been judged by their crooked or straight furrows, by their clean or weedy fence-corners and by the presence or absence of "trash" about the premises. These things are important, but success or failure on the farm in the future will not depend primarily on these details; the rising generation of farm boys must study the scientific principles that underlie soil fertility, they must learn the principles that govern plant growth, animal nutrition, breeding. It is laudable to teach the boys to love the farm and to make it beautiful, but the stable foundation for profit and success must be wrought out with hard study and labor in the less easy and superficial realm of science.

Teachers in our district schools often know a good deal about the practical details of farming, but their meager training in science will readily show the folly of expecting any scientific instruction of much value from them. The rural-school teacher must see to it that country life gets fair play, and if she knows no science, she should at least teach the child to be a close observer of nature, which, after all, is one of the most rational means of approaching agricultural science.

The rural high school is, in the writer's opinion, the feasible place to introduce the study of the scientific principles of agriculture in our public schools. This study should not be dabbled in by teachers who know nothing about it, but should be in charge of a man who has made a special study of the subject. The teacher of agriculture should, preferably, be competent to give instruction in other high-school branches, so that he will help keep expenses down. A proper respect on his part for the old-line studies is highly important, for such teachers, when they give undue prominence to their own departments, often demoralize the rest of the school, especially if their courses include much easy field and experimental work.

"There is no easy road to knowledge," and the writer's observation and participation in this work has led him to the firm opinion that science must be insisted upon first, last and all the time in an agricultural course, if it is to be kept up to the intellectual and disciplinary standards of other high-school courses. An excessive popularizing of the agricultural teachings tends to attract the poorest class of pupils from the other courses, and gets for the agricultural course the notoriety of being a "snap." The best course of study is the one that teaches the boy to think and to do his work with system; the pupil must gradually weave a mental cable that will stand the practical and scientific pull that the agriculture of the next half century will put upon it. Hard work has been the pass-word that admitted the farmer to the halls of success in the past; hard thinking is becoming the pass-word these days.

Scientific agriculture can hardly be taught with thoroughness, dignity and knowledge in grades below the rural high school. The child who is to become a physician is not given petty medical instruction in the grades; then why should the farm child endeavor to study agriculture before he has the capacity to learn it, and from teachers whose business it is to train the mind to work and to instill the fundamentals of a liberal education? We repeat, science is the need of the future farmer. Not petty stuff, but the real thing taught when the pupil has acquired the capacity to learn it.

EDITOR'S NOTE—Mr. Williams is contending for a sound principle—scientific thoroughness in agricultural teaching. But we think he misunderstands the position of those who believe that the schools need to be changed, clear down to the primary grades. All the grades are taught science—even the tiny abecedarians. They are given "nature study." That nature study might better be an introduction to practical farming.

The bigger children are taught physical geography, physiology and more "nature study." All these might well be devised along the lines of scientific agriculture. The arithmetic lessons should run along farm lines. The reading books might well contain those selections which will turn the thoughts of the child to the wonders of his own life and the occupation to which he is being brought up.

In short, the rural schools should face the thoughts of the child toward the farm, not toward the city. The best country schools, with their "Farm Arithmetics," their corn-judging and stock-judging contests, and their corn and cotton growing competitions are doing this splendidly. But they must do more.

And, above all things, we must not fall into the mistake of thinking that we can wait for the high school to set right the mistakes of the lower grades. Most of the children never reach the high school. What about them?

The next speaker on our program, Mr. Fred C. Warner, Columbia County, New York, believes in beginning agricultural instruction in the youngster grades; in fact, such instruction is given in the school of which he is principal. This school, located in one of New York's noted dairy regions, was, by the way, one of the earliest consolidated schools. It was organized in 1871, taking in nearly all the older districts within a radius of two or three miles. The continued success of the Union Free School, as it is called, is a pretty good indorsement of the consolidation idea that is now gaining ground so fast among those who have studied the country-school question most intimately. Mr. Warner gives below an account of the agricultural side of the course of study taught in his and other New York schools. It would be hard to give all this work, except in a consolidated school, but the teacher of even the one-room school will find Mr. Warner's words rich in suggestions.

### A Farmer's Creed

I believe in the dignity of all labor, but especially in that dignity centering about the tilling of the soil.

I believe in the worth of fertilizers, knowing full well that I may not indefinitely continue to take from the soil without putting something back.

I believe in good seed, being convinced that it is worth while to test my corn in order that every kernel may bring forth after its kind.

I believe in holding my crops for the best market and consider it my duty to be prepared to hold them.

I believe in the efficacy of paint and endeavor at all times to keep my buildings in repair.

I believe in having consideration for my stock, taking special heed that they are properly fed and watered at regular hours.

I believe in a square deal to everyone and everything.

I believe in lots of other things, too, not least of which is the duty I owe myself of keeping abreast of the times by reading every issue of the best farm paper on earth, FARM AND FIRESIDE.

ORIN EDSON CROOKER.

### Agriculture From First Grade to Eighth

By Fred C. Warner

MANY states of the Union have discussed the question of placing agriculture among the courses of their public schools. Here in the Empire State of New York the education department has outlined a plan whereby the subject may be taught, and has made it obligatory for teachers to pass an examination in the subject. I will try to give in the following some idea of this work and its purpose.

The aim of the first five years is to put the child into sympathetic touch with his surroundings and to give him fundamental knowledge by which he may interpret the facts of geography and agriculture, which are presented to him later in his course. The agricultural part of the course is suggestive and entirely optional. A mass of material is furnished to teachers for each year with the thought that the teacher may select as much as can be used effectively. In the sixth year there comes a review of basal facts, and generalizations are made in preparation for the study of the seventh and eighth years.

The work of the early years should not be simply the accumulation of a lot of facts about plants and animals, although that is the most that can be expected in the beginning. Enough should be taught about the habits of plants and animals, what and how they eat, their modes of getting about, power of adaptation to different seasons of the year, care of their young, etc., so that the pupil will realize that not only the animals, but the plants about him are alive, that they have certain needs very much like his, and that, like him, they are struggling to supply those needs in order to exist.

A special study should be made of the life—structure, organs, functions—of certain plants and animals, so that the pupil may understand the life of all of them from his knowledge of these few.

School-room collections of native wood, weeds and flowers, plants in boxes and pots, birds in cages and, if possible, fish in aquariums furnish facilities for illustrating the work. School-room work may be supplemented by excursions for observation purposes—if there is not time during school hours, we have found it possible to take time out of school hours. The work should be correlated with other branches, especially reading and composition. Pictures, poems, stories, fables and songs may be used to cultivate the love of nature and for country life. Children see better if they draw what they observe. Their observation work furnishes material for conversation exercises and written compositions.

In the lower grades such work as seed-testing is advantageous. The pupil should be encouraged to raise plants from seeds at home, not merely for the sake of having them, but so he will observe the whys and wherefores of their growth more closely than he does in the case of the regular garden and field plants. Many New York schools have gardens where the work is done by the pupils, under the supervision of their instructor. Simple experiments to show that plants need water, air, heat, etc., when they need them, and how they get them, are surprisingly instructive even to children who have been brought up among growing things.

In the study of animals, pupils should be required to find contrasts and make comparisons. Pupils should make collections of insects and make lists of those useful and those harmful, and learn why they are useful or why harmful, with emphasis on the harmful features. Girls, especially, will be interested in the care and study of flowers. Encourage the pupils to clean up and beautify the school grounds. While the teachers should indicate the lines of research, they should refrain from telling the pupils what it is possible for them to find out for themselves. Special care should be exercised that subjects are studied in season, when specimens are obtainable. Strawberries should not be studied in October and chestnuts in June.

The soil affords abundant opportunities for study—the different kinds, the characteristics of each kind, use of fertilizer, need of moisture, principles of capillary attraction, all yield topics for discussion.

With more advanced pupils, the aim should be to make the farm the center of observation and to show the importance of the farmer's place in the economic and social world, to show the personal factors upon which his success depends—energy, economy, executive ability, liking for the life, knowledge of the principles of agriculture and power to learn from his own and others experience.

Among the possible subjects of study are: Uses of labor-saving machinery; location of the markets; market reports taken from the daily newspaper. In the final year of the elementary course the state is studied as a great farm, beginning with its agricultural products and the location of the sections in which they are produced, the conditions which render crops favorable in one community and not in another. If the section in which the school is located is a dairy section, then a special study should be made of dairying, if a fruit section, then fruit-raising.

As a teacher I have found it extremely beneficial to my pupils and often to myself to invite some practical farmer of the district to talk to the school on such subjects as balanced rations, butter-making, the Babcock test, care of orchards, spraying for San Jose scale, etc.

There are numerous other topics that may be taught, which I have omitted—the subject has almost endless possibilities. If the above will bring any suggestions for the teaching of the subject to teachers of other states, if it will give the farmers of this and other states an idea of what our public schools are striving to do to give country children an education fitted to their life, I shall be content.

### Poor Lo's Good Schools

By Ross L. Spalsbury

RURAL schools should conform themselves to rural conditions. One great trouble with our rural schools in the past has been too much systematizing. All schools have been expected to follow a uniform course of study, usually laid out to conform to the requirements of the city schools, presumably because these schools are larger individually and make a bigger splurge. This is not right and many educators are coming to see that the course of study for a country school should be planned on a separate and distinct basis adapted to their needs. Perhaps no one person has done more in the recent past for betterment along this line than Jessie Field, the County Superintendent of Page County, Iowa.

It does not seem to be generally known that we have a system of schools in our country which corresponds in the main with the rural schools and which has taken several long steps toward the solution of the difficulty. I am referring to the little "Indian Day Schools" as they are called, which are scattered about on the Indian reservations and with which I have been connected for several years past.

These schools have much the same problems to contend with as have the rural white schools, and then some more in addition which make the work tenfold more difficult. The greatest drawback with which we workers in the Indian Day Schools have to contend is the lack of proper home training and influence to coöperate with us, so that in addition to furnishing the usual amount of instruction in the regular school subjects we have to supply also a large amount of home training.

[CONCLUDED ON PAGE 10]

# Eggs First, Feathers Second

## How the Standard Threatens Indian Runner Utility—By Mrs. Andrew Brooks

**Most of our readers have heard of the remarkable egg-laying performances of the Indian Runner duck. But how many, outside of professional poultrydom, know that the American Standard of Perfection, which sets the standard for poultry judges and hence for breeders, requires color and markings unnatural to the breed, which are obtained only at the cost of a falling off in the number and market qualities of the eggs? Mrs. Andrew Brooks, who writes the following article, is an "insurgent" in this matter, in that she advocates and breeds utility Runners as opposed to the Standard-breds. She is a "stand-patter" in that the utility bird represents the older type, from which the Standard is a departure. This is a matter of as much concern to farmers as to fanciers, for the prolific little Runner is a farm fowl too good to give up without protest.**

About seventy years ago a breed of small ducks remarkable for great laying capacity, activity and foraging ability was introduced into Cumberland, England. The first ducks were brought by a ship's captain from India, where they were supposed to be a breed native to that country. That is the story of their origin that is common in the neighborhood of their new home.

India and their running gait gave them their name. The value of the breed was recognized and in time the Water-Fowl Club standard was accepted in England for the breed. Mr. John Donald, F. R. C. V. S., of Wigton, Cumberland, wrote the description and the late Mr. Henry Digby of Haddersfield allotted the number of points. These men, together with Mr. J. W. Walton, Tow Law, County Durham, now secretary and treasurer of the English Indian Runner Duck Club, and other eminent authorities, accept the story of their origin given above. To one familiar with their nature it is easy to believe that their native country was a tropical one, where, by reason of their non-sitting instincts, the eggs were incubated in the hot sands, like the eggs of the ostrich, for instance. The running gait and remarkable foraging ability indicates that in times past they were wholly dependent upon their own exertions for a living, and the fact that the young are more active and sprightly than the young of other breeds may also be taken as an indication of such a history.

I notice that in a late book on ducks and geese an American writer asserts Runners came from Holland and Belgium, although he can advance no proof. We are content to know that as egg-producers they are equal, if not superior, to any breed of fowls.

Four and a Half Pounds in His Clothes
One of Mrs. Brooks' Drakes That Shows True Runner Type

### Color at the Cost of Utility

They have been bred so long by the English that they should certainly understand what constitutes a real Runner better than anyone in this country, where we have had them only a few years, about fifteen. It is an established fact that the natural colors are a rich fawn and white. The females have penciling in the fawn-colored portions of plumage, and the drakes have cap and cheek markings, also the back next to tail is of dull bronzy black or green, which fades when the coat is old to dark fawn, but which is never the same as the body color. The young of both sexes are of a pronounced shade of brown and do not show the fawn until they acquire the adult plumage.

Our American fanciers, when they took the breed in hand, bred in blood foreign to the breed to secure a lighter shade of fawn with no penciling, also to get head and rump markings of drakes the same as body color, which is contrary to nature. The inevitable result was loss in Indian Runner character, loss in type and in utility value, for these "changeling" ducks, as one might call them, are not such prolific layers, and many of the eggs are green and smaller. White eggs are characteristic of the breed—any other color denotes impurity.

Duck-eggs sell for about twice as much as hen's eggs for a month or so before Easter and are in advance the rest of the season. Our best American markets, outside New England, call for white eggs and pay more for them, and prolificacy and white eggs should not be sacrificed for a shade or two of color in feathers. Type makes the breed, not color. Correct type and shape are of first importance, as upon these depend activity and ability to forage, these in turn being closely related to great laying capacity.

It is a very conservative estimate to say that, with right breeding, feeding, housing and care, true Runners will give an average yield of from one hundred and forty to one hundred and fifty eggs in a year. This may be expected by the average poultryman or farmer. I am sure that still better yields may be obtained by careful management, but I would prefer to underestimate than the reverse, for extravagant claims of impossible yields harm the breed.

### Ducks Versus Hens in Australia

There is, however, no doubt that Indian Runners have made most remarkable records of production. The most celebrated performances of this kind were made in the laying contests held in Australia. The one that first attracted my attention was held in 1904. Then it was reported that five pens of Indian Runner ducks, six to a pen, averaged 191 eggs each and that the best pen averaged 215 eggs. I am giving these figures from memory, but think I am right or nearly so. In the eight annual Australian egg-laying competitions, twenty-five pens of ducks competed; all Indian Runners but one pen of Buff Orpington ducks. Two pens (twelve ducks) made an average of about two hundred eggs each, yet the official in charge of the competitions remarked that it was not a fair test, as no meat could be obtained for the ducks, and there was no doubt but they would have done better if fed meat soup in mash, such as was fed the hens in the same competition. He also said that many of the ducks were too young to lay in April, May and June, half of them not laying till June. It should be remembered that June is a winter month in Australia.

The ninth annual competition, for hens and ducks, is in progress at this writing and five pens of ducks will be carried from the first year into the second. The record of the best six hens, for the first six months of the competition now going on, is 687 eggs (from White Leghorns). Six Indian Runners have made a record of 790 eggs during the same length of time.

All the above figures, except for the year 1904, are quoted from *Poultry*, which has had direct, authoritative reports from these interesting competitions.

The Runners that made the wonderful records in the Australian Laying Competitions were bred to English standard and were true Runners—these are the best ones for commercial purposes. The fancier's products are best for exhibition, as the Standard fits their ducks. Runners are beautiful enough to be raised for ornamental fowls, but most people want them for practical purposes.

Is not this Indian Runner controversy merely an extreme illustration of a general fault to be found with the Standard of Perfection for poultry of all breeds? Does not the Standard encourage producers of pure-bred poultry to idolize niceties of comb and feather rather than to strive primarily for better production of meat and eggs? As one noted poultry editor says: "The time has come when the American Standard of Perfection should cease to require certain shape and color for no better reason than that the required shape and color is hard to reach up to by the ordinary breeder." More strictly utilitarian requirements would, we are sure, not only mean better poultry throughout the country, but a stimulated demand for pure-bred breeding stock. What the farmer wants is the assurance that he is getting not a bit of feathered bric-à-brac, but a profitable market bird.

EDITOR.

# Coöperative Associations While You Wait

## How Shrewd Farmers Can Get the Whip-Hand of Stock Buyers—By Clyde A. Waugh

One night last winter the telephone bell rang. A neighbor called. He asked: "How many of your lambs are ready to go? I've got forty and I think Johnson has thirty. I don't think Smith is paying enough. How about shipping them to-morrow?" We had forty ready, and we thought the same in regard to prices. So we were willing to join in our neighbor's plan. Inside of fifteen minutes the bell rang again and we were told that the third person was willing, that there was a car on the siding that we could get and that we should get the sheep in town by ten the next morning.

That was about all that there ever is to the organization of what we might term our Coöperative Live Stock Shipping Associations. There is but little use in effecting a permanent organization, for it seldom happens that the same set of men happen to have stock ready to market at the same time. Furthermore, when the association is but temporary, the trouble of formally organizing, with long by-laws and articles of incorporation, is avoided.

When a load of stock is shipped, each man weighs his stock at the local yards so that the weights may be uniform, though this is not absolutely necessary, being only a precaution in a possible case of mixed accounts. Each shipper marks his stock conspicuously in some manner or other. For instance, with the sheep, one did not mark at all, one used a spot of red paint and the third used black. Upon shipment, the commission man is notified that the load is made up of stock from different men and they keep the stock separate. They do not object to handling loads consigned in this way, nor do they charge more. I know of an instance where a commission firm had to make out thirty-two different items on one load of stock. After the load is sold the check with the bill of sale is sent to some one man in the bunch of shippers. The total overhead expense, such as the commission charges and the like, is added up and divided by the total number of hundred pounds shipped, and as the bill contains the weights of each lot shipped, the cost of shipping each lot is made up from this by multiplying the cost per hundred pounds by the number of hundred pounds that each man ships. This expense is deducted from the amount coming to each man as shown on the bill. This manner of settlement takes but a few minutes' figuring, and is satisfactory from every viewpoint.

If it is impossible to get up a load consisting of sheep or cattle exclusively, the two can be shipped in one car provided there is a partition between them. The commission charge is slightly higher. Hogs may be sent with either cattle or sheep. It is always well to order the car early so as to be sure that it will be on hand when you are ready to ship. Except in special cases, it is unnecessary to have a man accompany the car.

### Cooperation Makes Buyers Toe the Mark

In neighborhoods where many of the farmers ship their own stock on occasion they almost invariably get better offers from the buyers than in adjacent communities where they do not. It acts as a club and the buyer knows that he must pay up if he is to do business at all. In some instances it has forced buyers out of the running, and practically all the buying they do is on contract where both the buyer and the seller wish to speculate. What is more, if a man ever ships a load himself, he will always watch the markets more carefully afterward, and in so doing he will know better when to buy and when it is best to have his stock ready for sale. A knowledge of the market end of live-stock work is of as great value as a knowledge of the producing end.

A knowledge of markets and a close study of their variations is, as a matter of fact, essential, if one is to decide intelligently when it is best to ship for oneself and when it is just as well to sell to the local buyer. If the buyer will pay a fair price—that is, a price large enough so that when shipping rates, commissions and the like are added, it will about equal the price paid at the nearest large market—it is all well and good to let that buyer handle the stock.

To figure this matter out, of course, takes considerable special knowledge. To begin with, every man who pretends to be connected with live stock in any way should be familiar with market classifications of stock and be able to judge how his own stock will be classified. Then, by glancing at the market reports, he can immediately tell within a few cents of what his animals would bring in the open market. Prices seldom change fast enough so that there is much of a rise or drop between the time that one reads the reports and the time that he gets the stock in the yards, provided they are shipped immediately.

It is essential, also, that the farmer know the freight rates on different kinds of stock from his shipping-point. They are always fixed at so much per hundred pounds. Commission charges are always fixed at so much per car-load, in most cases the rate being ten dollars, and twelve dollars for double decks. Yardage charges are fixed at so much per head, and the prices for feed are run in the same manner, varying with market prices and with the different yards. When all these charges are added together, you can tell what is the cost of shipping per hundredweight of live weight from your local point. Deduct that from the market price for animals which classify the same as yours will classify; deduct also a small amount as the profit of your local buyer, and you can tell the price you ought to receive, delivered at the local yards. If, after you have thus checked up his offer, you find that it is fair, I believe it is just as well to sell to the buyer and let him take the trouble and risk

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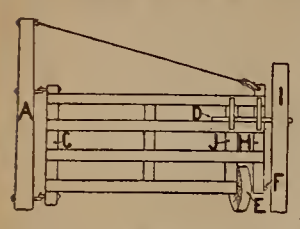
# The Headwork Shop

## A Kollection of Timely Kinx and Knax

### This Gate Won't Sag

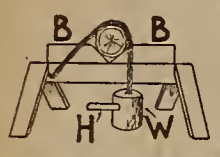



HERE is a farm gate that will never sag even though it is fifteen or eighteen feet long. The gate is hinged in the usual way, but the post (A) should be at least ten feet out of the ground and be well braced. A small clevis is connected to post by a heavy wire or rod; uprights G and H should be two-by-fours. A slide bar (D) goes through a mortise on post (I). E is a small wheel (one from an old wheelbarrow will do), F is an iron rod that serves as an axle for the wheel and should have a burr on its inner end where it passes through the crosspiece (J), which should also be a two-by-four.

This gate will swing either way and will not try the patience of its user by dragging on the ground at the lower corner.

E. S. CALDWELL.

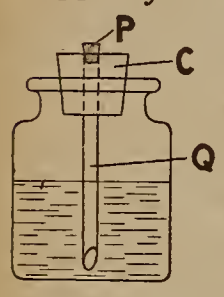
### A Hold-Tight Saw-Buck




I HAVE found this scheme of holding wood in the saw-buck to work like a charm. Take a two-by-four two and a half feet long and make four legs of one-by-four-inch pieces, each eighteen inches long. Then cut two pieces (BB) two by four by eight inches and taper ends to form a large notch for the wood to lie in. Nail these pieces firmly on top of buck.

Now take a piece of chain and staple one end to one side of the buck. Put a strong hook and a suitable handle (H) in a heavy block of wood and hook the block to the chain just so that it clears the ground. The pressure of the chain will hold firmly the wood that is being cut. GEO. KLIEGER.

### Handy Medicine-Dropper




A CHICKEN quill (Q) in a cork stopper (C) is handy for getting small amounts of liquid out of a bottle. Make a gimlet-hole a little smaller than the quill and put in quill before cutting end off.

This device is a great saver of liniment or other liquid. You can obtain one drop or as much as you want without wasting it. Be sure to scrape all the pith from the inside of the quill, so it will not clog. Put a small wooden plug (P) in top of quill to prevent evaporation. JOHN C. WELCH.

### Three Machinist's Kinks

ONE of the most annoying things is a tight nut. Heat a stout wrench that just fits the nut pretty hot and grasp the nut with it for a short time and then see if it doesn't loosen up. Some use a blow-torch, but the wrench is best, as it heats only the nut, which expands away from the bolt.

But if the steel is rusty, maybe the hot wrench won't bring it, and nothing remains but to split the nut with a cold chisel. There is a trick about this. Few nuts are exactly square. Cut straight in on one of the "wide" sides and the nut will open up readily. Where the nut is almost square, though, you may have to use calipers to find the wide side, and it may cut hard even then.

In punching out bolts, or in other work where you hold the tool and your helper wields the sledge, get a piece of stout hose, about two and a half feet long, and cut a hole through one end small enough to hold your tool securely, while you hold the other end of the hose. Then there is little danger of injury due to a glancing blow of the sledge. PAUL R. STRAIN.

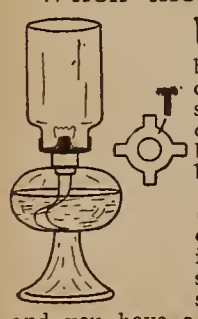
### A Good Soil-Pulverizer

THIS combined harrow, drag and soil pulverizer consists of two four-by-fours (BB) each ten feet long and set on edge with mortises cut on top about two inches deep for pieces (AA) which are four-by-fours three feet long. Bolt together at all four mortises with one-half-inch bolts reaching through both pieces. About every six inches in the front four-by-four bore holes just large enough so that harrow teeth can be tightly driven into them without splitting. Drive them until they extend three inches below bottom of drag.

In same four-by-four put in two screw-hooks to pull by. Nail a board on top to stand on. With three good horses to pull it, you have the finest pulverizer made. I have used one of these for the past four years and find it a great implement to use ahead of corn-planter or wheat-drill.

E. C. HARTSOOK.

### When the Chimney Breaks




USE a quart Mason jar for a number two lamp-burner. First take a stout cord saturated with kerosene. Tie cord around jar one half inch from bottom, burn cord and you can break bottom off.

Now take a piece of tin (T) with a two-inch hole cut in center and flaps cut in the edge as shown in sketch. Bend the flaps to support the inverted jar, and you have a good lamp-chimney.

W. M. CRUME.

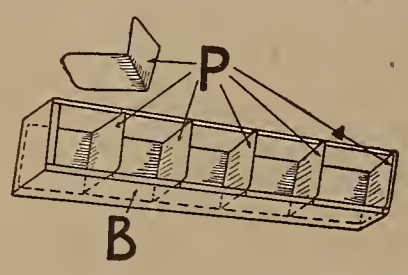
### To Carry Liquid on Horseback

WHEN carrying a can of oil or a bucket of water on horseback, use a short stick eighteen to twenty inches long. Grasp it in the same hand the can or vessel is in, and let the other end of stick rest against the saddle. This will brace the arm from the shoulder, easing the load and preventing a spill.

J. W. ROGERS.

### Handy Transplanting Box

HERE is a device to save time and prevent injury to roots when transplanting young plants from a window-box to their permanent location. The box (B), which is here sketched as viewed from above, is four inches wide and deep, inside measurement, with a length to fit the width of the window. The box is partitioned every four inches. In making it, a slight saw-cut is made in the sides for the partitions, which are made

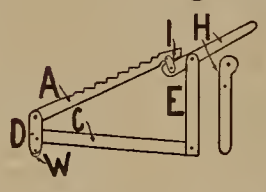



from old tin cans. To make the partitions (P), it is best to cut a pattern of thin pasteboard to fit the grooves, allowing it to project one eighth of an inch above top of box. The bottom of the tin where bent is narrow enough to lie on the bottom of box. The end tin has no groove cut in side of box.

When the plants are ready for transplanting, take hold of the top of the partition and you raise the dirt without disturbing the roots. This box may be made of any convenient size best suited for different plants. A rack or frame may be constructed for carrying a large number of them to the field at a saving of much time and labor.

EDW. A. CANNON.

### Strong Wagon-Jack

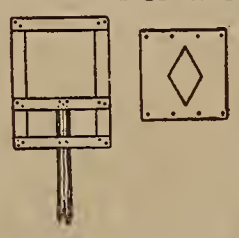



SOLVE the back-breaking problem of greasing heavy wagons by making this jack. I used one-inch oak material, though other strong wood will do. Take a one-by-four-inch piece (A) thirty-five and one half inches long, and after notching it as shown in sketch, cover the notches with hoop iron. Near the upper end cut out a little in the form of a circle. Now get another board (C) one by two inches and thirty-five inches long, also two pieces (D) one by four inches and twelve inches long. Make them round at the ends. Now get two sticks (E) one by one and a quarter inches and twenty-two inches long.

Make a handle (H) twenty-five and a half inches long, three inches wide at one end and gradually tapering to one and one half inches. Bore a hole one and one half inches from the big end and another three inches from the first. Bore the second hole a little below the center. Now get two pieces of strap iron (I) four inches long and punch three holes in them. Rivet them on to A and let the handle work freely between them. Make a little wheel (W) three inches in diameter to roll the jack on when sliding under wagon.

Get five bolts three and a half inches long and five sixteenths of an inch thick and you are ready to put the jack together. Put rivets through the end of handle to keep from splitting. I have lifted a load of hay with this jack. GEO. F. TURNER.

### For a High Tree

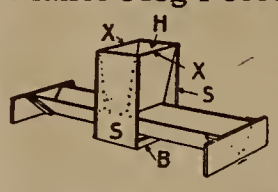


THE frame of this fruit-picker is made of light wood, about sixteen inches long by eight wide. Nail on this a piece of tin large enough to cover it, with a diamond-shaped hole with sharp edges cut in middle. Tack on frame a burlap bag to hold about a peck. The whole thing is mounted on a ten-foot pole. Put hole in tin over the fruit and pull. The stem will be cut and the fruit caught in sack. CHESTER STONER.

### To Make Cloth Water-Proof

I MAKE muslin water-proof for use as hotbed covers and many other purposes by immersing in paint-oil just long enough to saturate. Before oiling, cut and sew to any size needed. I also use this water-proof cloth to cover loads of produce, hay or grain stacks, or anything which needs protection from moisture. It makes an excellent substitute for canvas. E. G. BROCKWAY.

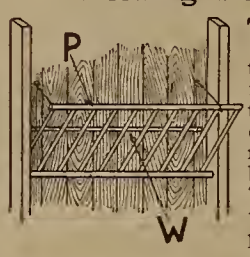
### Makes Hog-Feeeding a Pleasure




THIS kind of hog trough makes it easy for any ten-year-old child to feed greedy hogs without waste or trouble. The main part of the trough is V-shaped and is made from a two-by-eight and a two-by-six, each twelve feet long, spiked together in the usual manner. Bolt pieces of two-by-fours across the ends of each plank and then bolt on the ends of the trough, the bolts running through the two-by-fours.

To make the hopper (H), take a one-inch board twelve inches wide and twelve feet long. The crosspiece on lower end of hopper (B) should be in line with lower ends of end pieces. Cut into both sides of trough to admit sides of hopper (SS), which are two feet six inches long. Pieces (XX) which complete the hopper are one foot ten inches long. Keep trough standing on level ground, and when swill is poured into the top of hopper, it will run both ways. J. J. KLEIN.

### Folding Feeding-Rack



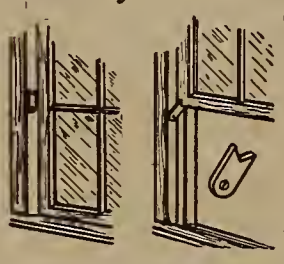

THE convenient feeding-rack shown in the sketch is suitable for use on the side of the barn, shed or in driveway. It takes up no room when closed back against the wall. To open, catch hold of the top pole (P) and pull it forward and down. Put the feed in. When the feed is eaten the weight pole (W) will close the rack. N. C. WILLIAMS.

### Every Little Bit Helps

ANYONE can in a few minutes make a bit for boring small holes in wood. This is how you do it. Hammer out the point of an eight-penny wire nail to the shape of an arrow-head. Then file the two edges sharp, being careful to sharpen on the correct edges for turning to right or left after being placed in brace. Hammer the head square to keep from turning. This nail bit is easily and quickly made and will do the work.

DAVE CONGER.

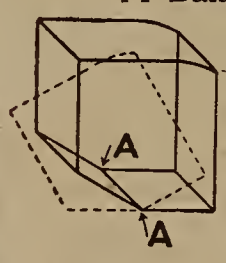
### Handy Window-Catch Kink



THIS simple window-stop is made out of a piece of hard wood one half inch thick, one inch wide and three inches long, with a countersunk screw-hole in one end to allow fastening it to the window-frame with a wood screw, and a right-angle notch cut at the other end in which the sash rests when the sash is raised and the stop turned to support it.

FRANK H. MARK.

### A Balancing Bin




A DRAWER filled with heavy articles pulls hard and a box made to hinge on the lower outside edge is hard to start out and goes back with a slam. To overcome these troubles, I made a box with two rectangular faces on the bottom. It thus balances over the center perfectly as shown in sketch. The dotted line shows it tilted out.

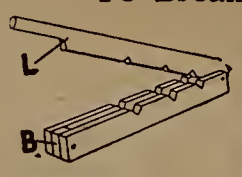
Drive finishing nails in the floor at AA and bore small holes in the bottom of the box to receive the heads. This keeps the bin in place. A. E. SHULTZ.

### To Headworkers

THREE prizes of five dollars each are awarded for the three best contributions in each number of the Headwork Shop. The award is made by post-card vote, each subscription to FARM AND FIRESIDE carrying with it the right to vote for the three knacks the voter thinks most valuable each issue. Votes are counted two weeks from date of issue. All other contributions used in this department are paid for at our regular rates. Where two persons send in the same or nearly the same idea, the contribution that is the neater and more clearly expressed will be given the preference.

Contributions should be written in ink on one side of the paper and accompanied by ink or pencil sketch where a sketch is needed to bring out the idea. We suggest that contributors retain a duplicate copy, as no manuscripts will be returned. The mail is so heavy that it is impossible for us to acknowledge receipt of manuscripts. Address Headwork Shop, Care FARM AND FIRESIDE, Springfield, Ohio.

### To Break Ear Corn



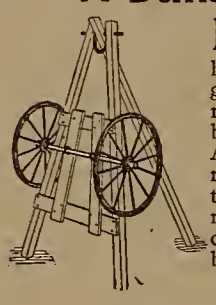

PROCURE three pieces of two-by-four scantling, two of these to be two and one half feet long and the third six inches longer. Three or four V-shaped notches are made on one side of each of the three pieces as shown in sketch. The notches should be made three or four inches apart, and large enough to nicely hold an ear of corn. The corresponding notches in the different pieces should be the same distance apart.

The two shorter pieces are placed side by side with the notched side up, while the longer piece is placed between them with the notched side down. A hole is bored through the one end of each stick at a point on each that will bring corresponding notches on each stick directly in line when a bolt is inserted and the middle piece worked as a lever. A small block (B) two inches wide is inserted between the free ends of the two short pieces, which are then securely bolted together.

To operate, place upon a solid foundation, raise the lever, place an ear in each of the pair of notches crosswise on the two lower scantlings, then force down upon the lever. It is much faster than the old hatchet method and does not shell so much corn.

P. C. GROSE.

### A Derrick on Wheels



IF A pair of old wheels and their axle are at hand, they can be used to good advantage on a derrick. Fasten by two "U" bolts as shown in sketch. A derrick which formerly required two or three men to move it, can then be moved by one man. It can also be fastened behind a wagon.

ABNER B. SHAW.

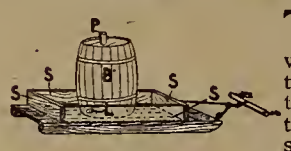
### Save the Buckets

STOCK-FOOD or candy buckets are about the handiest receptacles one can use around the stable for corn, oats or cotton-seed when feeding stock. The only drawback I find is that in dry weather they fall apart, even though they have been painted.

Here is a remedy for this trouble. Take a sound girth from a beer cask and soak it in water so it will bend without breaking. Take the measure of the inside of your bucket, saw enough out of the girth so it will go about three inches into the bucket, put the ends together and after driving down tight secure it with three or four nails.

CHARLES MATHISEN.

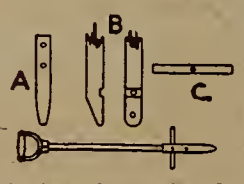
### Portable Watering Device




THIS system for watering hogs is very handy when there is no water in the hog lot or pasture. A low sled or stone-boat large enough to hold a barrel is covered with a water-tight floor and boarded up water-tight on the sides (SSSS). The upper head of the barrel is provided with a large bung or wooden plug (P) so that the barrel can be easily filled with water, yet be air-tight when the plug is in place. A half-inch hole (L) is bored in the side of the barrel about three inches from the bottom. When the barrel is being filled, the lower hole is, of course, plugged and when the device is being hauled about, both plugs are kept tightly in place.

On reaching the hog-lot, the lower plug is pulled out. The water will run out into the box to the height of the small hole, but no higher, and will remain almost at that height while the hogs are drinking. The principle is the same as that used in automatic watering devices for poultry. A coat of paint applied to the outside of the barrel and sled box will aid in making the device air and water tight. ANTON T. PFEIL.

### To Cut Dock Below the Crown




PROCURE a piece of steel spring (A) eleven inches long and two inches wide. Bore a quarter-inch hole in it one inch from the end and a second quarter-inch hole four inches from the first. Sharpen the other end. Now take an old fork handle (B) of handy length and about one and one quarter inches in diameter. Flatten a little on one side about three inches from the end and shave to a point on the opposite side. Bore two quarter-inch holes in it, one hole one inch from the pointed end and the other four inches from the first. Make a mortise in it one quarter of an inch deep and three quarters of an inch wide, into which the step fits.

The step consists of a piece of iron (C) one quarter of an inch thick, three quarters of an inch wide and nine inches long. Bore a quarter-inch hole through the center. To put the parts together, bolt the steel spring (A) to the pointed end of the bar (B) which allows five inches of the steel spring to project beyond the end of the bar. Before bolting solid, push the step (C) into the mortise and push bolt through bar, step and spring; then tighten firmly. Dock cut with this tool will never come up.

SOLOMON THOMAS.

### Headwork Awards February 25

F. J. Coombs, - - - Easy Rafter Cutting
H. E. Warrick - Headwork and Footwork
D. Conger - - - - A Pruning Ladder

# Perfection in Plowing

## Practical Points on Turning the Furrow by Experts in the Plowman's Art

### Pilot Rock Plowing-Matches

By Iowa's Master Plowman

JOHN FAIRWEATHER of Cherokee County, Iowa, bears the enviable title of master plowman. There may be men who are better knights of the furrow than he, but this is the way that his laurels were forced upon him.

In the state of Iowa there was held three years ago the first plowing-match of the Pilot Rock association, and its popularity rapidly spread. Now every fall farmers and their families within a radius of ten miles gather to witness the annual plowing-match which is held under rigid conditions, is supervised by a committee of expert farmers and is judged by a jury selected by the president of the association from men of experience who serve only for the honor attached to the office.

The judges are not allowed in the field while the contest, which lasts about three hours, is in progress. At the end of the match, honors and suitable prizes are awarded. The merchants and business men of the town offer special prizes and make the event a regular holiday. The average attendance is from four to five thousand all told. The ladies serve a dinner at thirty-five cents per plate, and the proceeds cover the cost of premiums and all expenses of the association.

By virtue of his success in these plowing-matches, John Fairweather is referred to as master plowman in Iowa and in this article. The benefits of the Pilot Rock association are given as follows in his own words:

The practical benefits of our plowing-matches are quite discernible in the community and are spreading out wider every year, not only in fine-plowed fields, but in every other branch of farm labor.

If more matches, with the ideals of the Pilot Rock organization, could be started in rural districts, the results would surely be of great benefit for better work on the farm. There is great difference of opinion among farmers as to what constitutes good plowing. Some like the easy-draft plow that puts the furrow partly on edge, throwing the top of the furrow over and making its work look as if it were half dragged. Such a plow is not capable of doing the best of work in the field.

Here is the judge's score-card used by the judges of our plowing-matches:

| | Points |
|---|---|
| Back furrow | 25 |
| Conformation of furrows | 25 |
| Straightness of furrows | 25 |
| Covering stubble and track | 15 |
| General neatness over all | 10 |
| Total | 100 |

We have some John Deere plows that are giving satisfactory results. They are the leading plows in our community, although the Defiance sulky plow has carried off the highest honors the last two years for the best work. The plow that I prefer is a plow that doesn't break and scatter the furrow, frequently leaving the stubble side on top, but a plow that rather inclines to hold on to its furrow with suction and compression on the wing of the mold-board. This makes the furrow somewhat rounded and well closed up, with each furrow showing itself distinctly. Good plowing pulverizes the furrows well, and half prepares the land for the seed-bed. JOHN FAIRWEATHER.

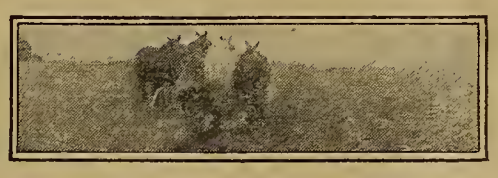
### Good Plows are Cheapest

By a Tillage Expert of the South

HERE is a letter from a North Carolinian on modern methods and better plows:

The soils of our country vary so much it is utterly impossible for us all to be governed alike in our thoughts relative to plowing. Here in North Carolina some soils need much deeper plowing than others, because of what we call "hard-pan." Such soils need breaking even if we have to use a subsoil plow, but our common yellow loam soils have a mellow subsoil which does not require subsoiling except in extreme cases.

However, as a rule we have found, in breaking land, that it is always best to plow to as great a depth as possible, and if they are in hard lumps, we would advise the use of a disk harrow and smoothing harrow



afterward, so as to get the soil in fine condition to receive the seed and favor crop growth.

Another thought relative to the time to do this plowing—I have always found that it is the best rule to plow as late as possible in breaking the land for several reasons, first of which is, if we plow too early in winter, it will run together and pack in the early spring after the rains and it is really in worse condition than if it had not been broken at all, so instead of breaking during the months of December and January we prefer hauling all the barn-yard manure we can and spread it on top of the land, letting it stand until March 1st.

This moistens and mellows the soil, so when it is broken it is in fine mellow condition, therefore ready for the seed. Of course, most farmers are in a hurry during the spring and often plant the seed when the land is not well broken. Therefore, a large percentage of the seeds do not germinate, and if they do, they have not the mellow soil in which to form their fine roots, so I have often said the time to work a crop is to do most of it before you plant the seed. There is nothing like starting right.

Too many of us try to plow like our grandfathers and can give no reason for so doing. I believe in modern methods, the use of better plows, bigger mules and better men with which to run them. If we will consider for a moment the cost of good plows, we will notice they amount to but very little more than inferior ones, and the best is always the cheapest.

Land that is not broken before we plant our seed will certainly not be afterward; therefore, I strongly urge the practice of deep plowing before planting seed and whenever it is possible subsoil the land. It will raise moisture in dry weather and settle the water in wet weather. W. A. SIMPKINS.

An Appreciative New York Field Getting Its Back Scratched and Being Coaxed Into Yielding a Bountiful Crop

### Requisites for Good Plowing

By a Pennsylvania Plowman

A PENNSYLVANIA subscriber writes thuswise in telling of the ideals to which a plowman and good plowing should conform:

To my mind, good, thorough plowing is the first essential to thorough soil cultivation, and if this be true, it is very necessary that it be well done.

A good plow is the combination of two wedge principles, one to cut the furrow slice and the other to lift and turn the slice when cut. This operation should be done quickly; that is, after the slice is cut away from the land, it should be turned up on edge and over to an angle of about forty-five degrees as quickly as possible. I like a long, curving mold-board, so that the furrow slice will be ground and fined as it is turned.

I believe that under conditions here in Pennsylvania all farmers should gradually increase the depth of their plowing. This will add to the feeding area of their plants and make increased plant-food available. As an illustration of this fact one has to look at a tile-drained field when it is in grass or grain and observe how plainly the drains can be traced by the ranker growth of foliage over these drains where the soil has been broken up to a greater depth than the rest of the field. To do a thorough job, I prefer a plow with a jointer, so as to turn into the soil all vegetable matter that may be on top, thus adding to the humus in the soil and getting all of this growth or manure out of the way.

A good plowman requires a good eye and a strong steady hand, so as to cut his furrows straight and of even width. I want a plowman to grasp his plow-handles firmly and guide his plow straight, and turn his plow out and start in at the ends evenly, so that he can plow his head-land after the field is plowed and leave the entire field with a smooth even surface.

The plow-team should be one that will work up evenly, and should be of sufficient weight to move the plow through the soil at a good brisk walk. When the plow is moving along at a good rate of speed, the land is turned better and the plowman can do better work.

Every plowman should carry a foot rule in his pocket, so as to know by actual measurement whether he is plowing four, six or eight inches deep. R. J. WELD.

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If you are one of the many renters who belong to FARM AND FIRESIDE's big family of readers, don't move from a farm without first having the landlord see what condition you are leaving it in, and don't take possession of a place till its owner makes a thorough inspection of the premises. This is fair not only to yourself, but to the other tenant and the landlord.

Cultivate the corn-field just before the plants burst through the ground, and follow at once with a good roller. This packs the soil, and is of great assistance in the conservation of moisture. It also pulverizes the clods, which promotes porosity of the soil.

### Valuable Odds and Ends

IT OFTEN happens that orchard trees fail to produce, and for this or some similar reason must be cut out. The wood of these trees is of value in making mallets, handles, planes, etc. The burls, or knotty places, are especially good for mallets. When seasoned they are highly durable. Where one has any number of these trees, it is well worth while to inquire of the local lumber dealer as to the price, which varies considerably with the locality. A little correspondence will enable any farmer who had apple-wood or other exceptionally hard woods to make a market for his product.

In almost every farm paper there are advertisements which will furnish a clue to a market for woods. Or one may get a copy of a trade paper devoted to lumber that will put him on the right track. Or advertisements in a good farm paper setting forth what one may wish to dispose of is almost sure to open up correspondence that will secure a market. City friends can often secure dealers' names, with whom a correspondence can be opened. E. L. VINCENT.

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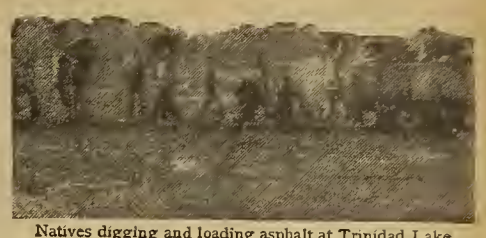
If you see an article advertised in FARM AND FIRESIDE which appeals to you, ask your dealer for it by name and do not buy something else which he may say is just as good. If he does not have what you want, go elsewhere, or write to the manufacturer and he will see that you get what you want.

### An Ax With the Plow

WITH most walking-plows it is possible to carry an ax without any great inconvenience to the plowman, in this way. Take a bit of harness strap eight or ten inches in length and nail it lengthwise to the lower portion of a plow-handle so that it will form a slot into which the ax blade may be inserted. Higher up on the same plow-handle, attach a similar piece of leather in the form of a loop of sufficient size to freely admit the ax-handle. Pass end of handle through loop and drop blade into slot, making sure that the slot fits the ax-blade snugly, thus preventing dislodgment.

When plowing new ground an ugly root or sprout can quickly be removed when you have an ax along. Give the horses a rest when near a stump and utilize this time in effecting its removal. The decrease of stumps each year is surprising.

P. C. GROSE.

Natives digging and loading asphalt at Trinidad Lake

**All "asphalt roofing" is not Trinidad Lake Asphalt Roofing—there's a great big difference. Look out for that when you buy your roofing.**

Ordinary so-called asphalt roofings are made of artificial products masquerading as real asphalt. They are nothing more than the residue from petroleum oil or native bitumens made into a black pitch, which is easily affected by changes in weather.

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The artificial asphalts have oils *mixed* with them, but they haven't the quality of the oils in the natural product; and they soon evaporate and leave the roofing "dead"—and it cracks, breaks and leaks, although at the first it may look like Genasco, the real Trinidad-Lake-Asphalt roofing.

To make sure of roofing that will permanently protect, ask your dealer for Genasco, the Trinidad-Lake-Asphalt Roofing, with either mineral or smooth surface. Fully guaranteed.

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to people who have never seen it. Write Brooksville Board of Trade for BOOK OF FACTS, describing different kinds of Florida soil. We have no land to sell but want settlers and investors to develop richest district in Florida, according to State Dept. of Agriculture; not pine land, not sand, but high and rolling with rich dark top soil and clay subsoil. No fertilizer, irrigation or drainage necessary. Raise 80 bu. corn per acre. Best for citrus fruits, truck and staple crops. An industrious man, with $500 to $1,000 capital, can be independent here. 300 ft. above sea; no swamps or marshes. Ideal climate, schools, churches, towns, good roads, all conveniences. Home seekers and investors please investigate. We need you and will help you.

**BOARD OF TRADE, Box 277, BROOKSVILLE, FLA.**

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A second short flax crop keeps linseed oil up, but the increase in price in pure white lead paint is not so great as you may fear.

Get at your dealer's the cost of 100 pounds of "*Dutch Boy Painter*" White Lead, 4 gals. pure linseed oil, 1 gal. turpentine, 1 pint turpentine drier—this makes 8 gallons of old-fashioned paint.

Compare this cost, either by the gallon or by the job, with what you used to pay for paint.

You'll find the difference so small that you can't afford to put off painting, or to paint with anything except "Dutch Boy Painter" White Lead. Write for free "Painting Helps" No. 647.

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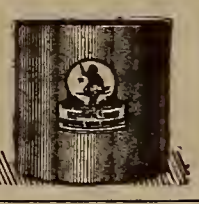


# Fruit-Growing

## Spray Materials Not Expensive

THE thorough spraying of orchards may require a good deal of time and entail much expense for equipment and labor, but fruit-growers cannot claim any longer that the spraying materials themselves are costing much money. The average cost of materials for making a barrel of lime-sulphur solution (concentrate) is, acording to New York growers, about two dollars and fifty cents. For winter spraying (for scale, etc.) it may be used in a dilution of one to eight or nine, which would put the cost of the materials for one barrel of spray mixture at about twenty-eight or thirty cents. Diluted for a summer spray at the ratio of one to thirty or forty, and with two pounds of arsenate added, the cost per barrel ready for application would approximate thirty-two to thirty-five cents. Even when the more expensive commercial concentrated solution is used, the cost of the winter spray mixture ready for application would be less than one dollar per barrel, and that of the summer spray only about fifty cents per barrel.

It is not a difficult task to make your own lime-sulphur solution. But don't undertake it unless you go at it right. First of all, you need a big iron kettle, preferably one holding one hundred gallons. Then you must have good fresh lime. No air-slaked lime will do. It should be guaranteed to contain not over ten, and better not over five, per cent. of impurities. The sulphur should be in fine division and feel to the touch like flour. Use the following proportions: Forty pounds of sulphur; forty pounds of lime of ninety per cent. purity, or thirty-eight pounds of ninety-five per cent. purity; fifty gallons of water. Boil the mixture from forty-five minutes to one hour. This will give you a clear solution testing twenty-three or twenty-four degrees Beaumé. In diluting it for spraying, use a little less water than you would if using the commercial concentrated solution, which usually shows about thirty-three degrees Beaumé. Add the two or more pounds of arsenate of lead to the diluted solution and spray. T. GREINER.

## Defense Against Plant-Lice

PLANT-LICE often ruin the foliage of fruit-trees before we notice the cause of the trouble. Those which attack cherry-trees are black in color, while those attacking other fruit-trees are green; in fact, they so closely resemble the coloring of the under side of the leaf that it is only by the curling of the injured leaf that we detect them.

Almost countless numbers of brown ants chase up and down the bodies of infested trees, and careful study has proven that the ants are the direct cause of the spread of the plant-lice. We are told that when winter approaches, the ant takes a few of those lice, packs them to winter quarters down in the ground and stores them for the winter, then when spring comes, carries them back and places them on the tender leaf, where they multiply and are distributed over the trees as the season advances; and from careful observations I have no doubt but this is true.

You may ask why the ant goes to so much trouble, then remember that an ant always looks out for himself, and careful examination shows the lice exude a honey-dew substance, on which the ant feeds and grows fat.

Spraying with coal-oil emulsion or whale-oil soap will kill the lice. A concoction made by boiling tobacco-leaves in water will also kill them.

On young trees I dip the infested newly-grown shoots in a pan of tobacco-decoction or whale-oil soapsuds.

Where plant-lice are bad, young trees should be carefully watched, for the repeated attacks injure them. OMER R. ABRAHAM.

## Drainage for the Orchard

A SUBSCRIBER living near Bethel, Ohio, has a young orchard of apple-trees gradually dying. The bark is dead and rotten just at the surface of the ground. Some of the trees are on low ground where water sometimes stands.

From this distance it looks like a case of "wet feet," sure death to fruit-trees. There may also be complications in the way of borers and crown gall. If the standing water affects any large proportion of the trees, the orchard is doomed unless drainage is provided.

Dig into the wood of the dying trees just at the ground surface for signs of borers. If borers are working, they must be all hunted out with a sharp knife and a wire once or twice during the summer, and killed. Crown gall is not in itself a disease that kills trees outright, but it has a weakening effect. No practical remedy is yet available for this disease. B. F. W. THORPE.

## Old or Young Grape-Vines?

I AM asked whether a three-year-old grape-vine is fit for planting. It may be true that we can successfully transplant old trees and old vines, provided they are sound, have good roots and are carefully handled.

Usually, however, we secure the best results from younger trees and younger vines. A young vine makes easy planting. It will readily take hold of the soil, and if in good condition, will make a strong growth even the first season. I would prefer the grape-vine that was started from a cutting or layer one year and then planted in nursery row to make another year's growth.

It should then show by its looks, and the appearance of top and root that it is strong and healthy, and you can depend on its doing well provided that the conditions (soil, etc.) are right. T. GR.

## Cherries Profitable

THE Montmorency cherry, even in big orchards, has proved quite a profitable fruit in some places. Paul Rose, the originator of the fine melon of that name, who resides in Michigan, packs his cherries in twenty-pound boxes, as Western fruit is packed, and gets higher prices for them in Chicago than paid for California cherries.

The English Morello is a later cherry than Montmorency, of darker color, but difficult to grow on account of its tendency to leaf-blight. It must be sprayed even after the fruit is gathered in order to hold its foliage. T. GR.


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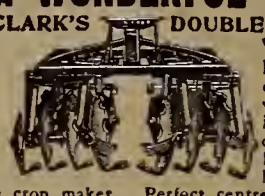

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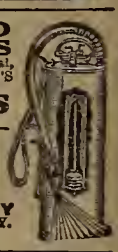

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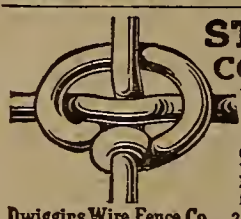

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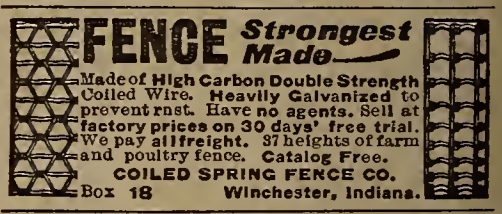

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# GARDENING
By T. GREINER

## The Strawberry-Raspberry

A READER in Ohio says that a writer in a Washington paper describes the "Yankee Prince raspberry-strawberry" as being an accidental cross between the raspberry and a large strawberry, freely producing berries which are a beautiful red, but dry, requiring cream and sugar to bring out their flavor, and as growing on a bush about three feet high, which needs no cultivation. This undoubtedly refers to the strawberry-raspberry, a species or form of the true raspberry, which was introduced a few years ago as a new and promising fruit.

City newspapers are likely to tell such nonsense as this alleged origin of the strawberry-raspberry (*rubus rosæfolius*, as the botanists call it). It is a native of Asia, and widely distributed over tropical countries. I had a few plants on my place, but they killed to the ground every winter until they finally died altogether. The berries are of good size and showy, but insipid in flavor. A good cook, of course, can make almost anything palatable, even the elderberry and sunberry, especially when plenty of good cream, sugar, lemons, spices and flavorings of all sorts are available. The strawberry-raspberry, however, is too tender and too unproductive for us here in western New York. Where this plant will grow, it may be valuable as a flowering shrub, and to some extent even for its fruit.

## Light on Seed-Potatoes

The best way to treat seed-potatoes, and to preserve them in first-class condition—namely, sound and plump and with all their vitality unimpaired—is to spread them in single layer on the floor of a well-lighted and cool room. The poorest way is to keep them in deep bins or barrels in a warm and dark cellar.

It will do no harm, and may do some good, to expose them for a few days to the direct rays of the sun. This treatment has a tendency to kill the scab spores and may help you to get a clean crop provided the soil is not infected with scab. I do not like to have the potatoes exposed to direct sunlight long, especially in an airy place where they may have a chance to become wilted and flabby.

The short stubby sprouts, half an inch or an inch long, which develop on the seed-potatoes during the treatment of "greening" them, do not easily rub off. But such potatoes should not be handled too roughly, and the sprouts should be carefully preserved, as they will spring into active growth as soon as the potato is placed in the ground under conditions favorable to growth. A maximum crop can be expected from perfectly sound seed only. Every sprout that starts on a potato and is rubbed off afterward, before or at planting, must necessarily decrease the yield, and if many sprouts are allowed to grow to considerable length (as they will if the seed tuber is stored in a dark and warm room, especially in big bulk) the vitality of the seed may be thereby injured and weakened to the extent of reducing the yield one half.

## How to Handle Asparagus

A reader complains that I have not said much about asparagus-growing in these columns. Yes, I have. The back volumes of FARM AND FIRESIDE will show this, and what I said about it will prove that I consider asparagus one of the most important market garden crops and about the very first thing that a home gardener should plant.

If the reader's family likes asparagus in the various forms that a good cook can prepare it, as well as I and my family do, then a hundred plants set in a bed or preferably in a long row, say eighteen inches or more from plant to plant, will not make too big a patch.

Secure good strong roots, one or two years old, and set them deep in very rich and well prepared ground. Give clean cultivation. Watch carefully so weeds will not secure full possession of the bed. Cut very sparingly, if at all, the second season, and freely or cleanly the third. Sandy soil and a southeastern slope give earlier stalks, but they come handy any time, up to the green-pea season.

Not much can be done in the way of application of plant-foods to coax the plants to come up earlier than their regular season, except that a little nitrate of soda scattered over the bed, fifty to seventy-five pounds per acre, may help slightly in that direction. Removing the rubbish and working the soil as soon as can be done in spring will be of some advantage.

## When to Fertilize

Many of our readers start the few plants they need in a box in a sunny window. That may do. They come up quickly. But there is danger of their growing long-legged and spindling. Such plants are weaklings. Transplant or "prick them out" early. Set them in boxes or "flats." Then put them into a cold-frame, where they have full and direct sunlight, air and room.

Transplant them again before they crowd one another, always giving more room. We can keep egg-plants pretty warm; peppers do not need so much heat; tomatoes still less. The best tomato-plants are grown slowly, in moderate temperature. Never allow them to be crowded. I do not even give them very rich soil. Common soil, such as any good garden loam without additional applications of manure or fertilizers is good enough for them. No need of greatly stimulating their growth at this time.

Save your rich manure, such as poultry-droppings, ashes, fertilizers, etc., until after the plants are set in open ground, and then put these substances as a top-dressing around the plants and cultivate them in. Then is the time to stimulate the growth of tomato-plants and help them to give a big yield.

## Dahlias for Profit

THE original stock is purchased from the florist in as many and as varied assortments as one feels able to procure. As new varieties are advertised from time to time these may be added and others not desirable are dropped out. Each little tuber will form from four to six other tubers so that one starting with one plant of each would in two years' time be well equipped for selling. It is possible to sell a small amount at the end of the first year, but this would require a larger number of plants to start with.

The ground is prepared as for corn or potatoes and the dahlia tubers set in hills and cultivated the same as potatoes. In late summer, before frost, sample blooms are arranged on moss in shallow boxes and carried around when you are taking orders for tubers for spring delivery. Ten cents each or one dollar per dozen for assorted kinds is the price asked and they sell at nearly every house. Twenty-five dollars a day is frequently taken in orders.

In late fall the tubers are dug and stored like potatoes in a dry cool cellar. In cold climates they have to be sprouted in the spring and are placed in a box, each color by itself, and covered with soil or sawdust. The tubers are kept moist and warm until eyes or sprouts show. They are then divided into pieces of one tuber and sprout each and along in May are delivered. A small ad. in the local paper will bring some orders and there is a local trade for the flowers during their season for parties, festivals and funerals.

A plot of ground one hundred feet square would raise fifteen hundred hills, averaging at least three valuable tubers to the hill, and enough for next year's seed remaining, would give close to five thousand tubers. These would sell at an average for about eight cents each, making four hundred dollars. The cost of raising and selling would not exceed one hundred dollars, reckoning good wages for time spent, and the actual cash outlay would not exceed from twenty to twenty-five dollars. MRS. J. M. MATHIE.

## Cloth Shade for Lettuce

LETTUCE sown in the open will mature from two to three weeks earlier and be in much finer condition if grown under cloth-frame. Surround the bed by boards about six inches high set on edge. On these put a light frame made the size of the bed and over the frame tack muslin or burlap.

Keep the cloth over the bed all the time and you will be surprised how much the lettuce will be in advance of that left exposed, and it is as crisp and tender as the hothouse plants.

The same plan is good for growing lettuce in midsummer, as the cloth protects it from the sun and also helps to hold the moisture. I have found this plan excellent.

MRS. C. W. BEYER.

## Favors the White Peach Blow

A READER in Morgan County, Ohio, writes: I noticed in a recent issue of FARM AND FIRESIDE that readers are requested to send a list of their favorite variety of potato. For the last two years we have planted the early White Peach Blow and find it a better and earlier variety than any other. The first year we got the seed we planted side by side the above variety and Early Ohio. The Peach Blows were at least two weeks earlier than the others.

They are white and mealy and continue so throughout the year. We consider them the best potatoes we have had for years and abundant yielders. MRS. G. W. JONES.

Common glass fruit-jars make fine miniature greenhouses for placing over the young and tender plants, when you only have a few, as they will prevent frost-blight and at the same time furnish the plants with plenty of that great essential to rapid development—light.

Tasmania is noted as an apple-producing country. Up-to-date American-made evaporators are being used there to dry the defective and consequently unsalable apples. More should be done along that line in this country. We can make by saving, and save by utilizing more of our waste products.

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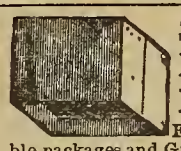

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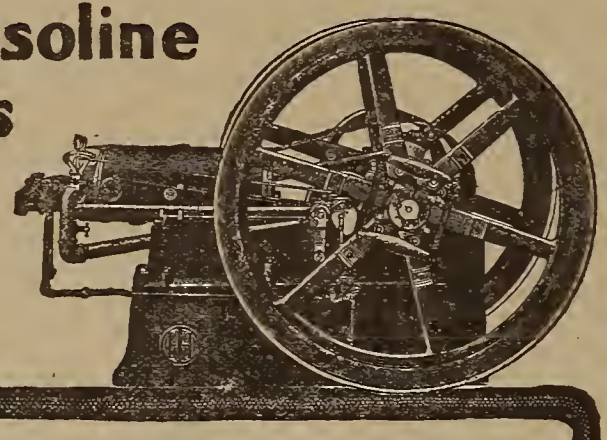

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# Farm Notes

## Latest Agricultural Reading

The Indian Runner Duck Book is the title of a clearly written and authoritative book written by F. H. Valentine. The author covers his field thoroughly, gives the origin of this important bird which has laid as many as three hundred and twenty eggs in one year, discusses types and outlines a system for marketing eggs.

Mr. Valentine favors the utility bird and opposes the present standard as ruinous to the utility qualities of the breed. Mrs. Andrew Brooks contributes an interesting chapter on this angle of the subject. Pages, 87; price, $ .50; published by F. H. Valentine, Ridgewood, New Jersey.

**Hilgard's Soils** has reached us in its new and latest edition. This book, while of technical nature, includes a thorough discussion of every problem bearing on the proper management of soils under all conditions. The physical and chemical composition of soils, the movement of air and water in the soil, causes of hard-pan, undesirable texture and factors affecting fertility are explained. There are twenty-six chapters. Pages, 563; price, $4.00; published by The Macmillan Company, 66 Fifth Avenue, New York City.

## *Poor Lo's Good Schools*

[CONTINUED FROM PAGE 4]

To get time to do this, the curriculum has been severely pruned until all, or practically all, the frills and furbelows introduced at the instigation of the city-school systems have been dropped. We confine our efforts to teaching the three R's; local geography (extending this to the United States and North America with only sufficient world geography to insure an intelligent appreciation of what the world means); nature study only in its direct application to agriculture (our drawing is given mainly in this work); hygiene and the means of securing sanitary surroundings in the country and a sanitary water-supply are emphasized and enough historical knowledge is imparted to give the pupils a pride in their people and their country. What more is needed in the common schools? The work outlined above gives all the culture required by the ordinary person or for that matter by any person. Until one has been engaged in such work as outlined he cannot appreciate how well these subjects fill the places of those subjects which have long been retained for their so-called cultural value, but which we have been forced to cull from our work.

Then a period of time varying from one hour per day to one half of the day is given over to practical work in the garden or school kitchen, where the hands are trained in conjunction with the head, with the result that these schools turn out much better specimens of all-around manhood or womanhood than could be developed in any other manner or by any other system. Each school has reserved a few acres of land varying with local conditions and needs, and the aim of the service is to make the place a model home for the Indians to emulate. Of necessity these little schools have been compelled to specialize in agriculture suited to limited equipment, and limited time and employees have rendered elaborate manual or industrial training out of the question. The principles of agriculture are taught in the school-room and put in practice in the school garden. The girls are taught plain cooking and plain housekeeping adapted to their limited equipment and meager supplies. The key-note of all is practical training.

In our academic work we not only prune the number of subjects taught, but the subjects themselves as well. For example, much that is taught as arithmetic has little or no place in the ordinary affairs of life; therefore, we leave it out. All a boy or girl needs to know are the fundamental operations of whole numbers and fractions, including decimals, practical measurements and percentage, including profit and loss and interest, with perhaps commission and insurance. Knowledge of these things should be thorough. Nothing more will be of much service in after life except bookkeeping and accounts, and those we emphasize. In selecting the material to teach in each of the other subjects of the curriculum the same principle is followed as closely as the limitations of the human mind will permit.

If the rural schools would adopt similar work, adapting it to their needs, much of the criticism which is heaped upon them would be eliminated and certainly they would be fulfilling their mission as they have never done before. This truth cannot be repeated too often: Rural schools should specialize in agriculture and rural conditions. Such a course would do much to solve the problem vexing our people to-day in trying to get the population to stick to the soil or to return to it if they have already left it. These changes and improvements must be suggested and insisted upon by the farmers themselves.

## Renovating the Cellar

As soon as the weather is mild enough to permit the work to be done comfortably, the cellar should be thoroughly overhauled. The fungus spores which have lain dormant all winter will grow with the advent of warm weather and unused vegetables and fruits will either sprout or decay. The first thing to be done previous to cleaning is to air the cellar for two or three days, a thorough airing with doors and windows wide open.

Remove all food and vegetables from the store-room. Potatoes still used as a household supply should be sorted and the sprouts rubbed off. Carry out ashes and other accumulations. Then go to work with a stiff broom and give all parts of the cellar a thorough sweeping, going into every corner and crevice, dislodging cobwebs and each particle of dust. Sprinkle the floor with sawdust before sweeping. Sweep with the prevailing air current.

In those parts of the cellar used for food or milk, give the shelves and tables a thorough scrubbing, using hot water, in which washing-soda has been dissolved in proportion of one heaping tablespoonful to ten quarts of water. Give as much attention to the under side of shelves as to the upper. Wash the windows and casements, dry with clean cloths. Put movable shelves out in the sun. Now go over the floor with a long-handled stiff brush and warm water, to which a tablespoonful of carbolic acid has been added for every ten quarts. Mop as dry as possible.

The next step in the renovating process is to give the walls a good coat of whitewash. Prepare this by slaking two two-pound cans of whitewash lime in a pail. Add enough water to the lime to cover it. Stir it with a long stick to mix it with the water. After the bubbling subsides, the slaking is accomplished. Add water until the whitewash is of a creamy consistency.

Apply it with a wide brush (soak the brush before using). Move the brush back and forth horizontally, beginning at the top of the wall and working downward. If part of the whitewash is put in a vessel small enough to be held in one hand while the work is done with the other, the task is more readily accomplished. Whitewash shows whiter on the wall as it dries.

Two cans of lime will make enough whitewash for four hundred square feet of wall surface. Oil-cloth or other coverings are usually out of place on shelves in the cellar. No matter how well they are tacked down, spiders and ants find lodging beneath the edges. It is better to give the shelves a coating of some good paint that dries with a hard, enamel-like finish.

In piling the wood-supply in the cellar, leave a space behind it for air circulation. The outer walls are more damp than the partition walls. Leave vacant storage bins or barrels uncovered during the summer months so that air may circulate through them. A handful of lime thrown in each is an excellent disinfectant. The windows should be provided with wire screens at once.

M. R. CONOVER.

## Reducing the Bug Census

Have you a flock of quail that feed about your place? I have and while I am writing this article they are running about in my yard near the window where I am sitting. It is indeed a pleasure to watch these beautiful birds. Their plumage is so rich, their eyes are so bright and their step so very quick. I am sure they are my friends and I like to be kind to them. While I think there is no better dish than fried quail, I do not wish to kill simply to satisfy my appetite.

I have watched these birds in their search for food. They stop beneath a weed and scratch away for the seed, and they eagerly hunt for bugs and worms, the kind that are destructive to crops. I know they are saving labor when they gather up the weed-seed, and I know that they are saving money for me when they gather up the bugs and worms that would destroy my crop the coming season.

It is really impossible for the farmer to estimate the value of his flock of birds. In my flock I have counted as many as thirty. Suppose each one eats a hundred weed-seeds each day. In a month they would devour ninety thousand seeds. That beats hoeing and plowing out the weeds that grow from these seeds. Now say they eat twenty worms and bugs apiece each day. In a month they will have destroyed eighteen hundred bugs and worms. That's better than having your crop injured or destroyed by these insects.

So I believe it is wise for the farmer to carefully guard his flock of birds. Post the farm and order the fellow with his dog and gun from the premises. You may insult him, but you save your birds. W. D. NEALE.

A supply of good pure water is worth more than all the pills and potions all the doctors in the country can dole out. Work hard and spend money liberally if need be to have good water on your farm.

Watch the ears of your horses if you want to get a sure index of your own character. They know what is in a man's heart by the sound of his voice, and they show what they think of it by the direction their ears point.

# Poultry-Raising

## "Eggs is Eggs"

LIMATE doesn't matter. Give the right conditions to form an egg, the egg is formed; and the hen is compelled to lay it. Nearly all poultry-papers and poultry-writers declare in picture, advertisement and strenuous article that you must feed ground bone, meat, meal, etc., at high cost per bag, or expect no eggs and scrawny chickens! At a time when dimes were scarce with me, I fell into this idea, and sent for a supply of fancy "egg food" to be mixed according to a formula I had. It cost me, altogether, $5.75 and lasted my flock of hens just thirty days.

Now, I kept a careful egg record before taking my medicine and after. And, while in the summer I got never less than nineteen dozen per month, with forty to forty-five dozen earlier, from the day I began to feed the mixture I got seventeen dozen the first month, eleven and a half the second, and thirteen and a half dozen the third month, after feeding them nearly six dollars' worth of material! Total egg yield that year, two hundred and forty dozen. Then I began to feed according to common sense—without egg foods, condition powders and green bones, and I ran my egg yield up to two hundred and forty-eight dozen and five the next year, and to three hundred and one dozen and five the year after that. Sixty dozen to the good, eh!

Well, here's how I did it, and I am writing for the one-horse farmer or two-horse planter. I tried all grains, and for laying hens I prefer wheat, even at a dollar a bushel, and I've paid a dollar per barrel for cabbage for them. Every other morning I give the hens a pan of scalded bran cooled; not too dry nor too sloppy. In their clean yard is fresh water in clean iron pans, crushed oyster-shell grit, and apples, apple-peelings, etc. I don't believe in feeding potatoes, raw or cooked. Sometimes in the winter I give water warmed until it is tepid, but not hot.

At night, even in the summer, they get a quart of wheat, corn or oats per thirty hens. If a cold night, a little more; but I try to give a different grain each night alternately. When the ground is bare send 'em out a bit hungry, keep 'em busy: and then at night stuff their craws. That's the way to feed. Don't give a big breakfast or they will sit under the bushes fat and stupid all day—and not lay at all. On wet or stormy days, and bitter days in winter I scatter grain in the scratching-house, and pile straw and dry leaves two feet deep over it, and tramp it down, and make them dig, sing, exercise and lay eggs. If the ground is bare, I cut corn on the ear in inch pieces and make them shell it in a dry place, themselves. They exercise and get warmed up.

Cabbage I hang on a spring out of an old window roller just an inch out of reach, so they must jump for each bite, and it is comical to see a group of hens jumping for bits.

All the butcher's scraps, etc., that I can get I boil and cut up for them, thickening the broth with bran. I never feed raw meat, no matter what experts say, for raw meat makes quarrelsome fighters—not quiet layers. Greasy dishwater, clabber, etc., I pour in a pan for them to clean up.

As a result I have eggs to sell all the year 'round. Others may get more eggs for a few spring months, but I want fall and winter eggs when the price soars; and I get them by making my hens work, and I've got all kinds in a flock. Feed no stale or sour feed, nor rotten or musty grains. When there is snow I feed them cut steamed clover or cabbage, but they prefer cabbage every time. For producing eggs cabbage is the thing, fed raw. If hens won't eat it thrown out, string the leaves on a wire, hang up, and watch them. CLIFFORD E. DAVIS.

## Salad for the Egg-Makers

IT IS sometimes difficult to plan for a continuous supply of green poultry-food during summer and early fall where no range is allowed. This is the way I manage: Early in spring sow a small bed of Swiss chard. When the plants are about three inches high transplant into a bed about eighteen inches apart, first twisting off one third of the top. When the leaves get five to six inches long (about May 1st) break off the outer leaves and feed them. Never disturb the heart, and the plant will grow all summer and until after a good frost.

Then about September 1st sow a bed of lettuce—I like Tennis-Ball or Big Boston—and when large enough to transplant set it in rows fourteen inches apart and about eight inches apart in the rows. After the first fall frost cut off two inches below ground on a dry day and store the heads in cellar, roots up, on one another and cover with light sacks to keep them dark. A supply of that kind of green food will last all winter. H. V. LONG.

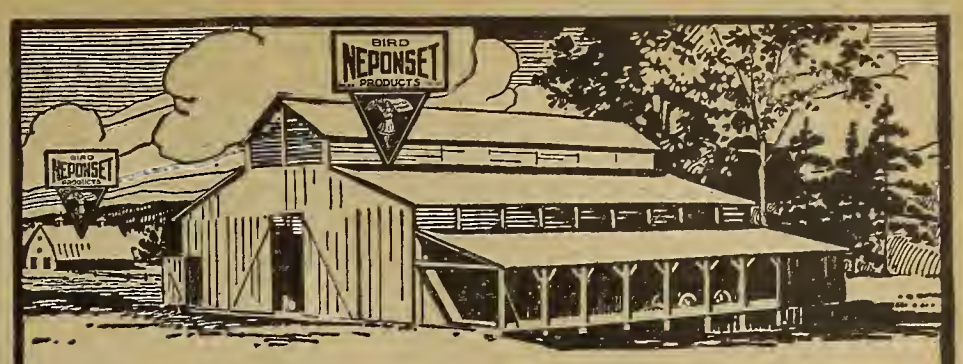
## A Competition of Breeds

A SUBSCRIBER sends us from Zanesville, Ohio, an interesting record of the performance of fowls of several breeds under approximately similar conditions. Their owner not only kept a diary, in which he noted egg production, but he also weighed a large number of eggs of different breeds to determine which were the heaviest and best suited to market purposes. In the table given below the number of eggs per pound, as determined by these weighings, is given, as well as the average number of eggs per hen per year for the different breeds that were kept.

| | Av. No. of eggs per pound | Av. No. of eggs per hen per year |
|---|---|---|
| Light Brahmas | 7 | 130 |
| Dark Brahmas | 8 | 130 |
| Partridge Cochins | 7 | 130 |
| Buff Cochins | 7 | 130 |
| Plymouth Rocks | 8 | 150 |
| Houdans | 8 | 155 |
| Black Spanish | 8 | 155 |
| Leghorns | 8 | 160 |
| Dominiques | 8 | 135 |
| Games | 9 | 140 |
| Bantams | 16 | 90 |

Sometimes we think that because one of our hens hangs down far behind she is spoiled and we may as well kill her. Don't do it. That hen will lay a lot of eggs yet. More than one man has cut the head off such a hen and thereby cut off a nice bit of revenue.

A New York poultryman sends this hint: "When planning the poultry business for the season, give a few minutes' thought to turkeys. If you never have had any of these birds, get a setting of some neighbor who has done well with them and raise a few. Do not let them run wild, though, and harass all the neighbors to death, but give them a nice big yard—a piece of ground too rough to cultivate is good—all fenced in. Feed them well and see if you do not make some good clean money with them next Thanksgiving."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The frame is heavier than is used on any other car of its weight.

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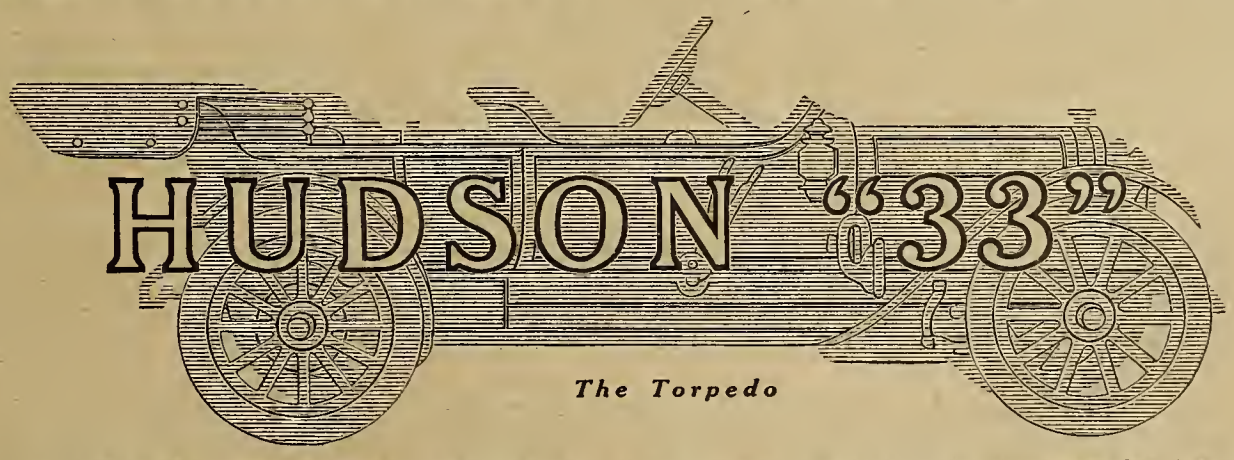
Don't these facts make you want to see the HUDSON "33"?

Write for complete detailed descriptions and address of your nearest dealer.

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# Poultry-Raising

## Sunflower Seeds for Poultry

SUNFLOWER-SEEDS are easily raised, very productive and an excellent ration for the chickens. Those who have never tried planting them for their poultry should try it this season. Their oily consistency renders them especially adapted to regulating the bowels and promoting egg-production.

Simply select a field suitable for ordinary crops, plant the sunflowers at the same season and in the same manner that you would corn, never more than three seeds to the hill, and cultivate the plants exactly the same as you would corn. In laying them by, it is unnecessary to hill up the rows, the object being to leave the ground as nearly level as possible. M. COVERDELL.

## Which Variety?

A question that has been asked me hundreds of times is: Which is the best variety of fowls for a business or market plant? Varieties come and go, like the fashions, and people waste thousands of dollars changing about. Just now many are going daffy on Orpingtons.

Then the Rhode Island Reds have also had a large run. There is not a great deal of difference in Rhode Island Reds, Barred and White Rocks and Wyandottes, and these three breeds or varieties are the cream of all poultry. I made my money with Barred Rocks, and if I were to begin again at the bottom I would take that variety and stay with it to the end. Those I have now are beauties to look at, and they are real egg-machines. But not all Barred Rocks are good. Some are run down. One must keep them up, like any other stock, by breeding from the best of his flock and the most vigorous.

One should not, under any circumstances, cross his birds with any other breed. Mixing ruins any flock. Keep your variety pure, and breed only from the birds that are nearest to being just what you want.

Breed up. Get good layers, with the best market shape, as soon as possible. You do not want large birds, but strong, healthy stock that makes rapid growth right from the start and looks well at all times.

Scrub stock of any kind does not pay anywhere near the profit that well-bred stock does. Even market buyers are willing to give more for a bunch of good stock than for scrubs or mixed stuff. A man had an order for sixty extra-nice chickens for a banquet. He looked mine over and at once offered me five cents a pound above market price for sixty, and got them. Good, even stock always catches the eye, and also the dollars. FRED GRUNDY.

What does the old hen say when you grab her by the tail-feathers or the hind legs and carry her that way? "Right side up, with care, mister!" Gather your bird up with her body under your arm and head out where she can see and she will stop squawking. You would yell bloody Indian if you were toted along upside down.

One of the best poultry-houses that can be devised is one that has three departments. The middle one is for the hens to roost in, one of the end ones they may lay their eggs in, while the one at the other end is devoted to exercise and having a good time. This last one should be the sunniest of all.

## Poultry in Mississippi

I AM sure your readers think the Gulf States people raise nothing but cotton. If so, you are mistaken, for it is an ideal poultry land. The climate is such that the poultry can go out in the open almost every day of the entire winter. A tightly closed hen-house is unknown. They are made of slatted walls, similar to a paled garden. A solid wall with tarred paper is not found in the Southern hen-house. We have green stuff growing all winter, therefore feed our flocks at very little expense.

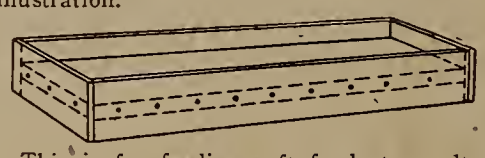
While all breeds of poultry seem to do well, the writer's preference is for the Barred Plymouth Rock. They are gentle, early maturers, splendid layers, good setters and the best of mothers. Turkeys do well, too, in the South. As we have plenty of land, they range out away from the house and consequently are not subject to disease.

The mite is the worst enemy we have to deal with, but we find that by using plenty of whitewash, put on hot, and keeping the hen-house clean and all old nests burned they are not a formidable pest. In raising chickens, as in our own living, cleanliness pays.

An oat-patch close to the house furnishes young chickens with a green food they like well early in spring, and later by just letting the oats stand, the chickens eat as the grain falls and have a fine, continuous, healthy feast. Then, later, we have a pea-patch. What a great boon this is to the Southern man can hardly be realized by a Northerner. How the young ones grow, and how the hens lay! And the result, eggs the year around! MRS. N. M. PRINCE.

## Reversible Feeding-Trough

ON BOTH edges and ends of a one-inch board of handy size nail a four-inch strip one half inch wide so that it will project equal distances on both sides as shown in illustration.



This is for feeding soft foods to poultry and is reversible, thus insuring a clean trough free from sour mash left from the previous feeding. D. CONGER.

## Set Eggs of Winter Layers

SHALL we use just those eggs that seem most uniform in size and shape and with good quality of shell, selected from the product of the whole flock? That, I believe, is the method used by the average poultryman. Many tell us never to try to hatch eggs from hens that have laid all winter, as the vitality of such hens is not considered good.

But applying well-established principles of breeding to this matter, if we hatch only from hens that have not laid until toward spring, are we not fixing the habit of non-winter-laying? We have all seen in our flocks hens that are apparently well, that eat heartily and of the same rations that all are fed on, yet they will not lay until spring. Others, with exactly the same care, sing, cackle and lay all winter.

Shall we ignore the eggs of the latter when we get ready to fill the incubator, for fear that her vigor is less than that of her less productive sister who has just begun laying? It is my belief that she has the greater vigor of the two, else why the prolific laying?

If her eggs and those of her kind only, are hatched, we may reasonably expect more winter eggs from next year's pullets. This method of selecting followed year after year cannot fail to greatly increase the yearly gains from our flocks, as the question of winter eggs largely decides the matter of profit.

The trap nest is the ideal way of accurately locating the best winter layers. But for many of us it is impossible to spend the time that this necessitates. As we care for the fowls and gather the eggs from day to day, we cannot fail to know by sight those individuals that are the busy workers of the flock. And as we come to recognize such, we can separate them from the others, taking care to give them clean, deep litter in which to throw small grains, to induce plenty of exercise all day long.

Place muslin curtains over at least one sash in each window to secure good pure air at all times. Allow none in this pen but known winter producers, with a cockerel, if possible, bred by the same method of selection.

This pen should not have over ten or twelve hens in it. Even seven or eight good layers will supply eggs enough to run a one-hundred-and-twenty-egg incubator. If we can count on six eggs a day, in three weeks we have enough to fill the machine. I always turn setting eggs at least every second day, keeping them at a temperature of about fifty-five degrees, and have had as good luck with eggs three to four weeks old as with freshly-laid ones.

As open weather comes on, if only one pen can be turned loose, let it be the breeders, furnishing litter to make exercise for the others until such a time as we have secured all the eggs we wish to hatch. MRS. E. G. FEINT.


# Why Take a Chance With Your Eggs or Chicks?

Don't blame your poor hatches to the parent stock, or the eggs, because lack of moisture, irregular heat, and cheap incubators are responsible for the death of millions of chicks in the shell every year.

**The International Self-Humidifying Incubator**

is absolutely automatic in every function, unvariable temperature, positive moisture from the moment of starting the hatch until necessary to properly dry the newly hatched unit of future profit, so thoroughly safe-guarding its entrance into poultrydom as to guarantee its livability.

**Your brooder losses are not always the fault of the chicks. Ultimate success depends on the proper mothering of chicks.**

**The International Sanitary Hover**

is the only one positively supplying the highest temperature at the outer edge. Therefore no loss by crowding to the center and every chick has a chance under this hover. Entire metal construction. Portable and adjustable to all conditions. Eliminates expensive brooder house equipment.

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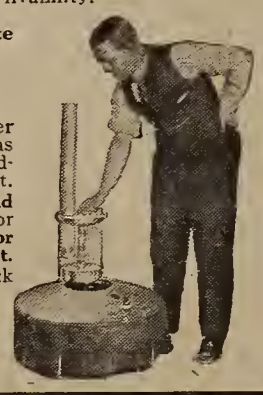
Send to-day for 1911 catalogue on incubators and hovers, also our stock catalogue on Rancocas Strain Baby Chicks and Hatching Eggs.



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Comes in rolls ready to lay. Can be applied by anyone with a knife and hammer. Each roll contains nails and lap cement, with full instructions.

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Get **GAL-VA-NITE** roofing from your lumber dealer. (Look for the sign "Ford's Galva Knight.")

If he hasn't a stock, write our nearest office and we will send you "The Inside of An Outside Proposition."

FORD'S

**FORD MFG. CO.**
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# Live Stock and Dairy

## The Best Type of Shetland Pony

AFTER a careful study of the Shetland pony for the past twenty years as a breeder and raiser, buyer and seller, I have come to the conclusion that the miniature Percheron type is the best seller and the most satisfactory, general-purpose, all-around pony to breed. The height should range from thirty-eight to forty-four inches. The American Shetland Pony Club has no definite standard of size, so a breeder has to determine size by what the general public demands and will buy the most readily, and in my experience I have found the miniature Percheron the best seller.

There is a great diversity of opinion among breeders as to what constitutes the ideal type of Shetland pony, so I have left it to the purchasers, the public, to decide what they like best.

It would be much better for pony-breeders if the American Shetland Pony Club would establish a standard and, putting all prejudice aside, would consider fully the purposes of the Shetland pony and the uses he is put to. Then adopt a certain standard to go by. It might be considered by many that, since we are breeding a pony that has for centuries been bred on the Shetland Islands, we should adopt that as a standard of the established type.

But we must take into consideration that times have changed and are changing all the time. Ponies are being put to more arduous

Preferred Type of Percheron Pony

work. A large number of families are now using a pony for the family driving-horse around town, while some with small farms are using the pony to do the light farm work. Pony livery stables have sprung into existence all over the country in the last few years. So it will readily be seen that a clear consideration of the use to which the ponies are put should determine their type. It is the thick-set, blocky, well-muscled pony which fills this new demand. The stock found in most of the show-rings of to-day find very little favor when it comes to a general-purpose pony. Most of them are of a nervous temperament.

The disposition of a pony is of supreme importance on account of their being handled so much by women and children. Above all things they must be gentle, kind and safe; their nervous systems must be calm and quiet under trying circumstances; never high-strung, nervous and mettlesome.

We find this calm, quiet disposition in a Shetland pony having an intelligent, broad, brainy forehead with a full, prominent eye. Ninety-nine times out of every hundred a gentle, kind, fearless and good-natured disposition goes with brains and intelligence.

The work required of Shetland ponies is very often much more than that required of the large truck horses in proportion to their size. The average Shetland will weigh about four hundred pounds. The ordinary pony buggy will weigh about two hundred pounds. This with two and often three children, whose weight will average seventy-five pounds, makes a combined weight greater oftentimes than that of the pony. It will be readily seen by this that the pony has to pull a load out of proportion to his weight and height. Consequently, he should have plenty of lung capacity to supply oxygen; strong muscles and well-knit bones to correspond. The chest and body must be deep; the muscles large and well placed.

A plump, fat, slender-limbed pony must not be mistaken for a thick-set, heavy, well-muscled Percheron type of pony. Fat is not muscle and adds only to the appearance, not to the strength. The ideal type of pony combines both grace and sturdiness, which necessarily makes a strong impression on the prospective buyer.

The color of Shetland ponies is wholly a matter of personal taste. We can each have our own preference in the matter. Those breeding to sell should take into consideration the most popular and salable colors. I find the evenly marked, black-and-white spotted ones to be the most preferred; sorrel-and-white and bay-and-white follow next in color. Spotted ponies are just as pure bred as are the solid colors. C. G. PHILLIPS.


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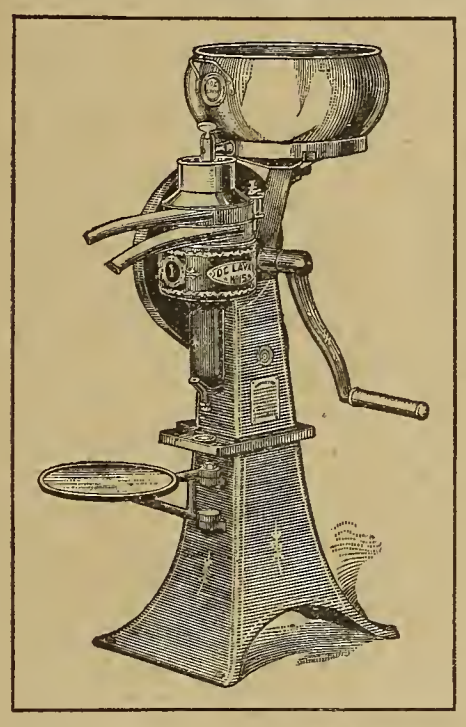
# DE LAVAL CREAM SEPARATORS

Ten years ago there were a dozen different makes of creamery or factory separators in use. Today over 98 per cent. of the world's creameries use DE LAVAL separators exclusively.

It means a difference of several thousand dollars a year whether a DE LAVAL or some other make of separator is used in a creamery.



Exactly the same differences exist, on a smaller scale, in the use of farm separators. Owing to the fact, however, that most farm users do not keep as accurate records as the creameryman, they do not appreciate just what the difference between a good and a poor separator means to them in dollars and cents. Nine times out of ten the farmer can't tell whether or not he is wasting $50 to $100 a year in quantity and quality of product through the use of an inferior cream separator.

If you were in need of legal advice, you would go to a lawyer. If you were sick you would consult a doctor. If you had the toothache you would see a dentist. Why? Because these men are all specialists in their line, and you rely upon their judgment and skill. When it comes to buying a separator why not profit by the experience of the creameryman? His experience qualifies him to advise you correctly. He *knows* which separator will give you the best service and be the most economical for you to buy. That's why 98 per cent. of the world's creameries use the DE LAVAL exclusively.

There can be no better recommendation for the DE LAVAL cream separator than the fact that the men who make the separation of milk a *business* use the DE LAVAL to the practical exclusion of all other makes.

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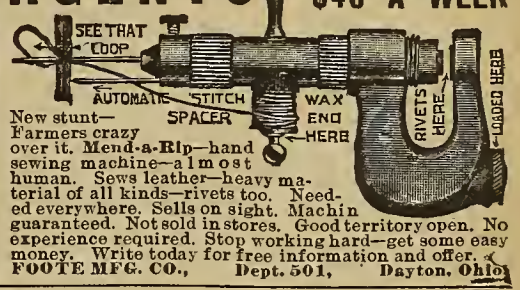


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In quality of material, method of construction, durability with real service, as well as in distinctive appearance, "Pittsburgh Perfect" Fence stands pre-eminently first.

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at the joints, these are the fence's strongest parts. "One solid piece of metal" aptly phrases it. Through the hardest usage, "Pittsburgh Perfect" Fence stands erect, even and firm.

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Republic Ornamental FENCES are made by cabling large heavily galvanized wires and inserting heavy upright wire pickets, corrugated only at point of intersection; thus forming an immovable joint without injuring the galvanized coating. Most durable fence made. A variety of beautiful designs. May be erected with wood or iron posts. Write for catalog. If you need Farm Gates, write for Special Farm Gate Catalog.

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# Live Stock and Dairy

## Post-Card Advertising

A BREEDER of pedigreed live stock and grains, not wishing to do expensive magazine advertising, made a select list of five hundred names of men living in his own county. Then, at an expense of about seven dollars, he sent post-cards to these men; on these cards was printed what the breeder had for sale.

This postal advertisement was really very attractively written up and netted almost a thousand dollars' worth of business, in the very community in which the man lived.

Such an astonishing success encouraged the man to send out postal bulletins at regular intervals. These always draw well; in fact, there are scores of farmers who look forward to them with great eagerness.

A great many farmers have not done quite so well, some few even better, by the post-card system; but nearly all are more than pleased with the results.

Members of the Wisconsin Experiment Association, especially, are beginning to employ this system. It is a cheap way of selling stock and building up a local reputation. WM. A. FREEHOFF.

## Soiling With Sweet Corn

AFTER an extremely dry season like the past summer when pastures were of little value, the subject of summer soiling crops forces itself upon us.

I have had great success feeding sweet corn and believe there is nothing equal to it as a milk-producer. There is also no summer crop that can be used for soiling under conditions here in Ohio which will produce so much good feed to the acre. I make the first planting as early in the spring as possible and then every two or three weeks until the middle of July.

I begin cutting and feeding it to cows in the stable as soon as the ears will make good roasting-ears, and if I see the weather is going to get too dry before I can feed up the patch, I cut it up and put it in the barn. I have found the cow eat it nearly as well as when green.

It keeps the cows up on their milk-flow as nothing else will for me and then it is surprising to see the amount of feed that it will make to the acre. I had one patch of a half acre and from this I fed seven cows for six weeks, giving each cow a large armful once a day. I believe if we will come to depend more on the summer silage, sweet corn and other soiling crops and less on pastures, the production of milk in summer will be steadier and more profitable to the man with cows. S. H. P.

Mongrel live stock and poultry will be predominant on our American farms till more of our farmers keep their own sires, and thus know something about the blood origin of every living thing on the premises. It pays to keep the best and breed the best.

## *Coöperative Associations While You Wait*

[CONTINUED FROM PAGE 5]

of shipping. But if his price is so low that it more than offsets that service, then is the time to ship your own animals.

Always remember that it will cost you no more to ship a load of stock, as an individual or in coöperation with your neighbors, than it will cost the buyer. Railroads do not discriminate in matters of this kind. The stockyards people do not give a rap as to whose stock they are yarding and feeding. The commission merchant will be as active for you as for the shipper, for he is in certain cases even more anxious to get new customers than he is to keep some old ones. At present, at certain markets, commission merchants are not allowed to telegraph the day's markets to their customers. With the telephone, the rural delivery and the daily paper the buyer has little chance to get hold of the day's prices at an earlier date than you, so when he says that he "just heard there was a drop," it will pay you to investigate.

When you make your sales on the basis of such figuring, you have the buyer up a tree. You can either ship the stock yourself or force him to pay a higher price.

The man who has enough stock on hand to make up a full car-load can ship without much trouble, but it does not pay to ship a car-load that is not full. The railroads charge a minimum rate for a car of live stock. If this minimum is thirty thousand pounds, they will charge for thirty thousand pounds, even though you have but three steers in a load. This does not amount to much when the market is near, but when it is distant, freight eats into the profits pretty rapidly. In instances of this sort we have our old friend coöperation to fall back on. The buyer, in order to pick up a load, probably visits several different men. If you are dissatisfied with the price he offers, there are almost always a number of others equally dissatisfied. These men can just as well do what the buyer usually does—combine several lots and ship them in one load. You might as well save his profit, if it seems excessive, because you can ship a load as well as he.


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Simple, cheap, easy to use. No digging necessary. Special driving tool free with orders of 100 or over.

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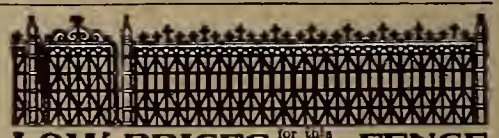

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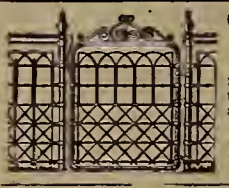

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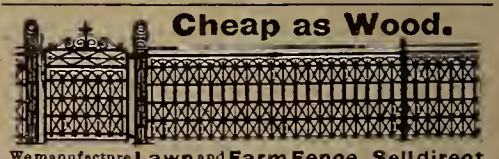

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# Live Stock and Dairy

## Dairygrams

SAVE the manure carefully. It does not belong to you. It belongs to the land; and while he who makes the two grass blades grow has been called a public benefactor, surely he who makes the growing of the one barely possible is an enemy of the state, in that he is undermining the foundation of the public well-being—the fruitfulness of the land.

My cow may have a potential endowment of wonderful power as a dairy producer, but it must be quickened into activity by sufficient feed and good care; how, therefore, am I to know the quality or extent of her endowment unless I keep her full fed, watered, cared for, protected every day in the year? She is a follower of the simple life, but it must be a full one.

Then there is a difference in cows. Beyond a certain line, they are born not made. One cow in my stable will give over eight thousand pounds of five per cent. milk; another near her, not unlike her in general appearance, about the same size and outward disposition, will eat about the same amount of feed and make six thousand pounds of five per cent. milk. Both, so far as I can manage, are doing their best.

W. F. McSPARRAN.

A savage bull—a broken fence—a call—a cry—an old man or little child gored to death by an angry bull. Let us at once make fences strong enough to protect our loved ones from the fury of savage bulls, and stop the terrible and needless toll of death from this source.

## Weaning the Porklings

I BUILD small inclosures in one side of the hog-lot near the sows' feed-troughs. Long shallow troughs are placed in this and sweet milk poured in them, soft corn soaked in water or boiled is scattered over the ground. By the time the pigs are two weeks old they are eating as well as their mother.

Their feed is gradually increased and when they are eight weeks old they are shut off from the sows. There is no squealing or refusing to eat. In a week or less time they are changed to a lot by themselves, where they contentedly put on flesh.

D. B. PHILLIPS.

## Sensible Sheep Talk

IF YOU have only two sheep, have them good ones, for a bad or inbred sheep is a nuisance.

Sheep love a hilly pasture, with a wide-spreading tree or two.

To keep away flies, a dab of pine-tar on the nose is good.

All sheep must have clear cool water in plenty to do well. I've raised too many not to know this.

A safe, dog-proof fold can easily be made with six-foot wire netting, with the house at one end.

C. E. DAVIS.

A patient man or woman weighing one hundred pounds will teach the skim-milk calf to drink quicker and easier by allowing the little fellow to suck their fingers, gradually lowering its head to the pail of milk, than will a man of irritable temper, weighing two hundred pounds avoirdupois, attempting to sit on the calf's head and force it down to the milk—of which fact ten thousand farmers bear milk-stained testimony.

Don't be too abrupt in changing the calf from the cow to skim-milk. Give it the milk just as it comes from the cow for two or three days, gradually increasing the amount of skim-milk given, till it is made the entire diet.

Don't be in any particular hurry about separating the calf from the cow with a caked or highly inflamed udder, as the little fellow will, by sucking, draw more inflammation from her udder than any application of medicine known to science.

## Fall Lambs From Rambouillet Ewes

IN THE series of articles lately appearing in FARM AND FIRESIDE the use of ewes of the Down breeds for the raising of fall lambs was especially urged because I believe that it is to the mutton breeds we must look to obtain the highest quality of lambs demanded by the buyers in all the great markets. Lambs fattened in midwinter must always be articles of luxury for which high prices are paid, and the farmer who would share in those prices must be prepared to offer nothing but the very best in breeding, rearing and feeding. Moreover, cultivators of a moderate acreage cannot hope to com-

Mr. and Mrs. Rambouillet

pete with the great Western sheepmen in the feeding of lambs of secondary qualities.

In a series of experiments conducted at the agricultural experiment station of Purdue University, ewes of the Rambouillet breed were successfully used in the production of fall lambs. Since the sheep of that breed are well established in many districts they would in some cases be more readily obtainable than pure-bred Downs.

The experiments also seem to have proved that corn-silage is very eagerly eaten by both ewes and lambs, that the ewes to which it was fed while pregnant gained rapidly in weight, but that no special advantage was observable in their lambs as compared with those of the ewes having no silage. The fact that in the first year four of the lambs out of fifteen having access to the silage died from what the veterinarian of the station pronounced to be poisoning by the accidental eating of decayed silage shows that there is an element of danger always present in the use of corn-silage, though possibly that danger might not be present in the silage of alfalfa, rape, rye, vetches, timothy and similar succulent forage, all most desirable feed for ewes and lambs. Turnips and mangles have so long proved themselves the most desirable winter succulents that it would be well wherever possible to grow the small acreage of those roots, which, when properly cultivated will suffice for quite a flock of ewes and lambs. The various items determining the net returns from each lamb are included in the following statement:

Average age at time of slaughtering, four months.

Average weight at same time, seventy-five pounds.

Average gain of lambs, .61 pounds per day.

[CONCLUDED ON PAGE 16]


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pays for itself many times over. It is a digestive tonic, formulated by Dr. Hess (M.D., D.V.S.) and intended to *aid and strengthen* animal digestion. A horse getting a trifling dose of it twice a day turns his smaller mess of hay and grain into muscular energy and physical fitness. A milch cow receiving it converts more meal, hay and fodder into milk. A fatting steer, sheep or hog, fed regularly with small doses of Dr. Hess Stock Food, grows faster and lays on sweeter, firmer flesh than would be possible without its use. "A poor ration, well digested, is better than the best ration poorly digested." This is "The Dr. Hess Idea" of live stock feeding and all farm animals are the better for it. Dr. Hess Stock Food relieves minor stock ailments. Sold on a written guarantee. Ask your dealer for it.

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## Live Stock and Dairy

### *Fall Lambs From Rambouillet Ewes*

[CONTINUED FROM PAGE 15]

Selling weight at Indianapolis, thirty-six and three fourths pounds.

Average value of pelt, fifty cents.

Selling price, per pound, thirty cents.

Dressing percentage, fifty per cent.

Express to Indianapolis, sixty miles, fifty cents. Net value of each lamb, $11.12.

The lambs were sold under contract to a hotel at Indianapolis. They were killed and dressed at the farm, properly cooled, sewed up in white muslin and delivered the day after killing, by express.

Careful consideration of these results suggests to me the following observations: The readiness to breed as early as June, I believe, depends more on the sheep being in proper condition than on their breed. My own experience with nearly all the Down breeds when crossed on Lincoln, Oxford or Dorset rams has led me to this conclusion; but I have had no experience in raising fall lambs from long-wooled ewes. The Rambouillet ewes were bred two years in succession, and seem to have done rather the best in the second year.

The method of marketing was novel, but nothing prevents any farmer living within one hundred miles of any large city availing himself of it. It is hard to tell whether these lambs would have brought top prices if offered on the hoof in any of the great markets. They would have secured remunerative prices anywhere, but I think it would be hardly safe to expect them to compete with equally well-prepared lambs of any of the pure-bred Down breeds.

Had they been sold in Chicago, for instance, on the hoof, they would have had to realize fifteen dollars per hundred pounds in order to equal the foregoing net value of $11.12 per head. This would have been very unlikely to occur, especially to lambs showing their Merino origin, and shows most emphatically the value of seizing every possible advantage in marketing articles of luxury such as these lambs.

A series of experiments carried out at the Iowa Agricultural Experiment Station over a period of four months, in which ten lambs of the various breeds of sheep were fed exactly similar rations, gave the following results.

I will here give those of the four breeds chiefly referred to in this article. They seem strongly to confirm the ideas I have formed from practical experience, This first table refers to the mutton side of the question. The figures given are the average of the lambs of each lot.

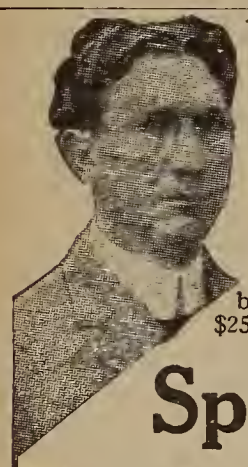
| Breed | Gain per head—pounds per day | Cost of feed per lb. of gain | Selling price per cwt. in Chicago |
|---|---|---|---|
| Shropshires ..... | .48 | 2.88 cents | $5.60 |
| Rambouillets .... | .37 | 2.91 cents | $5.00 |
| Delaine Merinos.. | .29 | 3.78 cents | $4.25 |
| Lincolns ..... | .55 | 2.89 cents | $5.25 |

The following are results with regard to fleeces:

| Breed | Average age of fleece | Weight of fleece | Value of fleece |
|---|---|---|---|
| Shropshires . | 360 days | 8.75 lbs. | 98 cents |
| Rambouillets. | 255 days | 6.60 lbs. | 73 cents |
| Delaines ... | 359 days | 9.90 lbs. | 100 cents |
| Lincolns ... | 332 days | 14.30 lbs. | 179 cents |

To obtain the best results from any of the Merinos for breeding fall lambs, the use of a pure-bred ram of one of the mutton breeds is absolutely necessary. A good Shropshire will be as satisfactory as any. The tables refer to yearling lambs, but results will be found similar to the case of ninety and one hundred and twenty day lambs. Another important point is that the Lincolns always seem to endow their offspring with sturdier constitutions. This, I think, arises from the fact that the breed originated in the highlands of Lincolnshire, where they were subjected to the bracing breezes from the German Ocean. JOHN PICKERING ROSS.

Mrs. L. D., an Indiana subscriber, writes: "Here is the way I keep my milk in summertime. I put it in gallon jars and set these in a wash-tub of cold water and change the water morning, noon and night. This way answers very well. In the warmest weather I can mold my butter very nicely, and customers take it at the house for twenty-five cents a pound the year round. I use jars instead of crocks because I have found that many more will go into a tub."

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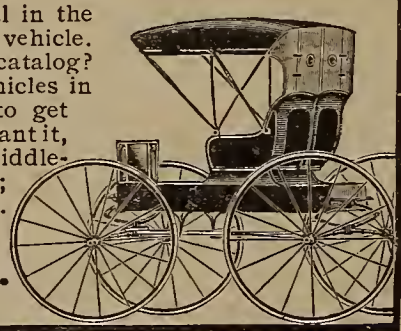

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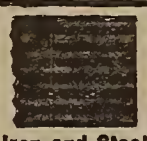

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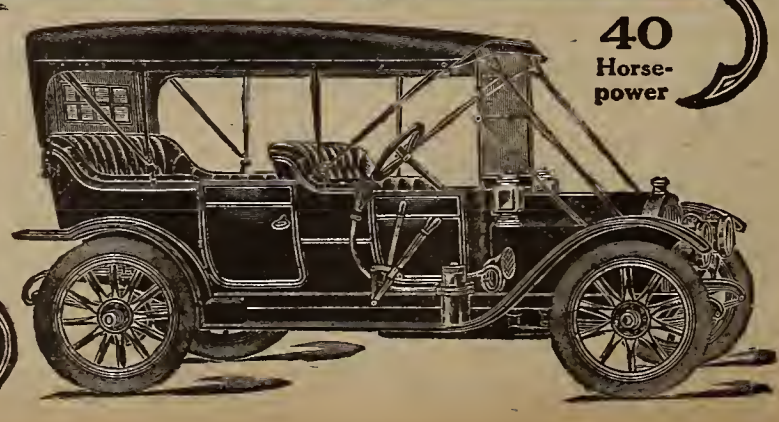

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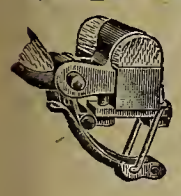

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Sews Shoes, Harness, Buggy Tops, Canvas, Grain Bags, Anything. Sells at sight. Astonishing low price to agents. Big profits. To show it means a sale. We want a few good, live hustlers in each county. Splendid opportunity to make big money. No experience needed. Write quick—now—for terms. A postal will do. Send no money.
A. MATHEWS, 5946 Wayne Street, DAYTON, OHIO



**Mane and Tail Rubbing.**
STEWART'S ANIMAL SOAP

will relieve this condition by destroying the irritating parasite. Cures Mange. Kills Lice, Fleas and Ticks. Harmless. Sanitary. Odorless. 25 cents a bar.
THE STEWART SOAP COMPANY
Box 445 Cincinnati, Ohio

**ELECTRIC Steel Wheels**

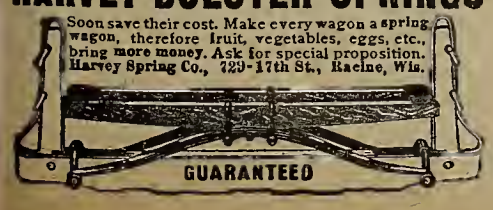
Fit all running gears. Get a new wagon just by buying wheels. Unbreakable, almost everlasting. All heights and tire widths. Also new Electric Handy Wagons. Write for book on "How to Make Old Wagons New." Free.
ELECTRIC WHEEL CO., Box 13, Quincy, Ill.



**CALVES** RAISE THEM WITHOUT MILK
Booklet Free
J. W. BARWELL, WAUKEGAN, ILL.



**HARVEY BOLSTER SPRINGS**



Soon save their cost. Make every wagon a spring wagon, therefore fruit, vegetables, eggs, etc., bring more money. Ask for special proposition. Harvey Spring Co., 729-17th St., Racine, Wis.
GUARANTEED


## Live Stock and Dairy

### Pony Sensitiveness

A SUBSCRIBER near Rome, New York, asks if anything is organically wrong with his eight-year-old Welsh Arabian pony (saddle and driving), which has the following peculiarities: When driven he sweats profusely, and upon being stopped pants instead of breathing naturally. When he swallows, he makes a gulping noise in his throat, though not apparently distressed in any way. He is fat and in good condition, but nervous and sensitive to handling. He has a heavy coat of hair, which has not been clipped, owing to difficulty of managing him, as he resents handling of his head and feet.

I think this pony's sensitiveness can be cured by simply cultivating his acquaintance and gaining his confidence by being careful never to hurt or mistreat him. Horses are very intelligent; they soon learn to know their friends and often a horse's disposition is changed by being treated differently.

I have now in my stable a young horse which, when we got him, was exceedingly bad about allowing his hind legs to be cleaned. This was because his skin was very thin and tender and his groom had not taken his sensitiveness into account. However, in about ten days after we had him, he became very gentle, owing to the fact that we were always careful not to hurt him. Horses vary in the time needed to make such changes, but from the description given I do not think the case of this pony is a bad one.

I should take the sweating to be on account of his heavy coat, and the noise in swallowing does not sound from the description to be anything serious. Still, if a good veterinarian is near at hand, it would be well to have him look at the pony. Sometimes horses that have had distemper have, on recovery, a little chronic breathing trouble that does no great harm, though, of course, they are better without it. DAVID BUFFUM.

### I'd Sooner

I'D SOONER be a farmer
And turn up the honest dirt
Than sit around in idleness
And wear a credit shirt.
I'd sooner have a little cot,
All mine, from slums aloof,
Than have a flunkey-guarded hall,
With mortgage on the roof.
I'd sooner eat my chicken fried,
With cats about my knee,
Than gorge on canvas-back alone,
With none to comfort me.
I'd sooner ramble o'er the hills
And all life's glories view
Than yawn the morning hours away
And know not what to do.
I'd sooner be a farmer true,
No social state to keep,
And not a thing to trouble me
When I lie down to sleep.
Give fools their gold to cause them care
And wear their lives away;
Give me enough to eat and wear,
And farm work every day.

CLIFFORD E. DAVIS.

### Attractive Farm Correspondence

I ONCE wrote to two men about some live stock they had advertised. From one I received a pen-written scrawl, from the other a neatly type-written letter, its value enhanced by a striking letter-head.

Now there may have been no difference in the quality of the stock sold by the two men. But the one approached me in a slovenly, don't-care sort of manner, while the other spared no pains to attract favorable attention.

I judged, and probably nine out of ten would have done likewise, that the man who knew enough to be businesslike in his correspondence would be the better stockman.

This little incident is not related in order to have every farmer invest in a type-writer, but to emphasize the necessity of making a good first impression.

Many farmers, with the aid of their favorite paper, are able to put out advertisements that compel inquiries, but they do not make the sales they might simply because of the slovenly appearance of their follow-up correspondence.

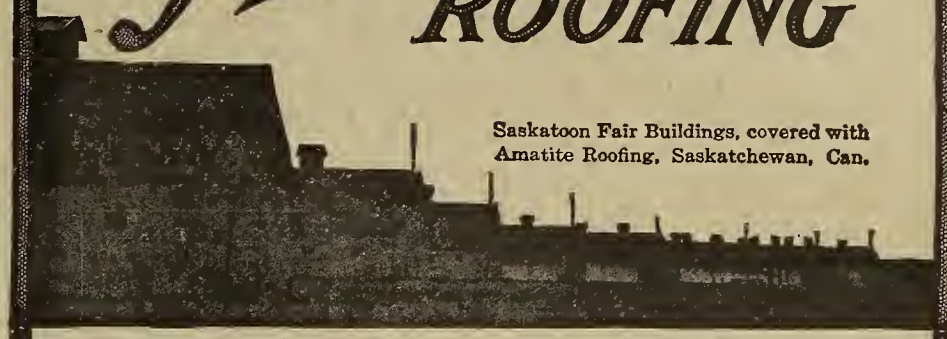
Farm correspondence must be attractive. Have printed envelopes; procure some striking and original letter-head. Use good quality paper. And if you cannot use the type-writer, be sure and write legibly. In this day of business, however, a type-writer is of great aid.

Then be short and to the point; in fact, be businesslike in everything you say. Carelessness is an enemy to success.

WM. A. FREEHOFF.

In breeding the mares this season, remember that you cannot reasonably expect an offspring with any greater virility than its sire possessed—perhaps not quite as much. And the same is true of all other live stock and poultry.


**Amatite ROOFING**



Saskatoon Fair Buildings, covered with Amatite Roofing, Saskatchewan, Can.

**60,000 Feet of Amatite Roofing**

The accompanying view shows a series of buildings at the Saskatoon Exposition, all of them covered with Amatite Roofing.

Amatite was selected because it was inexpensive, easy to put on, required no care or attention or expense afterwards, and would give excellent durability.

If ordinary smooth roofing had been used, these roofs would require painting every year or two at considerable expense and trouble. Amatite, however, has a mineral surface which *requires no painting.*

Use Amatite for every roof where you want to save expense It is the most economical solution of the whole roofing problem.

Amatite Roofing requires no skilled labor to apply; it costs no more (in fact much less) than other roofings; and the fact that it requires no painting makes the total expense far below that of any other type of roof covering.

You can use Amatite for every kind of steep roofed building. We supply galvanized nails and liquid cement for the laps free of charge.

Send for free sample and booklet. Address our nearest office.

BARRETT MANUFACTURING CO.

New York Chicago Philadelphia
Boston Cincinnati
Minneapolis Cleveland
St. Louis New Orleans
Pittsburg Kansas City
Seattle

TRADE B MARK



**United States Cream Separators**

Are built to give the **utmost satisfaction,** at the **lowest price** at which complete satisfaction can be bought.

**Absolute close skimming** the hope of all separators, has been an actual accomplishment of the U. S. Cream Separator for over 10 years.

**Write for Catalog No. 69 and learn the reasons why.**

**VERMONT FARM MACHINE CO**
**Bellows Falls, Vermont**


*It is to your advantage to mention Farm and Fireside in writing to advertisers. Farm and Fireside folks get the very best attention.*


**$15.95 AND UPWARD**
SENT ON TRIAL. FULLY GUARANTEED.

**AMERICAN SEPARATOR**

**A brand new, well made,** easy running, easily cleaned, perfect skimming separator for $15.95. Skims one quart of milk a minute, warm or cold. Makes thick or thin cream. Thousands in use giving splendid satisfaction. Different from this picture which illustrates our large capacity machines. The bowl is a sanitary marvel and embodies all our latest improvements. Our richly illustrated catalog tells all about it. Our wonderfully low prices on all sizes and generous terms of trial will astonish you. Our guarantee protects you on every American Separator. Western orders filled from Western points. Whether your dairy is large or small, get our great offer and handsome free catalog. ADDRESS,

**AMERICAN SEPARATOR CO.,** BOX 1058, BAINBRIDGE, N. Y.

# What Does It Cost To Operate An Automobile?

THAT depends almost entirely on the make of car you buy. The first cost of some cars is little, and the operating, or second cost, is big.

¶ The logical and safe thing is to consider the second cost first, and the first cost last.

¶ In designing, in selecting material, in manufacturing Overland cars, we have spared no effort or expense to produce cars that will give utmost service at the least possible expense.

¶ That our policy is correct is amply proven by the unparalleled success of the Overland—the most economical car *in the world* both in first cost and second cost.

¶ There are now about one thousand Overland dealers. One of them wants the opportunity to prove to you by actual comparison and demonstration the full significance of the strong statement just made.

¶ Twenty-five thousand enthusiastic

Overland

owners will vouch for that statement in no uncertain terms. Below we reproduce one typical, unsolicited expression. We have purposely selected from the mass the letter of a physician, because, of all men, he is the one who must have an absolutely dependable, economical car for continuous service—summer and winter, day and night.

INDIANAPOLIS, IND.,

OVERLAND AUTO CO., TOLEDO, OHIO.

GENTLEMEN—When I talked of buying an automobile more than a year ago there were some very important questions that no one was prepared to answer: They were concerning the upkeep of the machine. I have kept a careful tabulated account of my year's expense, and am glad to furnish you with this information.

With the exception of ten days sickness last winter, my machine has been run as a physician runs a machine in his practice scattered all over the city, besides taking many pleasure rides of evenings and some Sunday rides to adjoining country towns.

| | |
|---|---|
| My gasoline cost me for the year - - | $59.67 |
| Lubricating oil - - - - - - - | 8.65 |
| Transmission grease - - - - - - | 2.63 |
| Anti-freeze fluid - - - - - - - | 3.25 |
| Battery cells - - - - - - - | 4.25 |

This makes for the year an average of 21½c. per day for actual running expenses.

Other expenses, including all supplies and mending tubes, tires, patches, etc., as well as licenses and all expenses connected with owning a machine, cost an additional 23½c. per day, making a total of 45c. per day. I have not heard of any car that compares with the Overland in economy for upkeep.

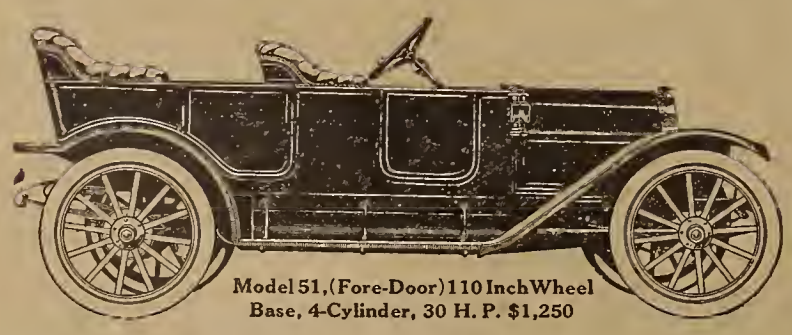
Yours for the Overland,
W. R. STEWART, M. D.

¶ It is, of course, impossible for any manufacturer to say how much it will cost an owner to operate his car. There is a wide range of difference in conditions and in drivers. The very nature of Overland manufacturing methods insures a car that must perforce be efficient, reliable and economical. We know from our own experiments and from actual experience of Overland owners that it offers the greatest automobile value when purchase price is considered and that it can be operated and maintained at less cost than any car of similar rating. We make five models, all with high duty, quiet, four cylinder motors, from 20 to 40 horse-power. There are twenty-two body styles, priced from $775 to $1675. This car shown below is model 51, with fore-doors and center control, that is to say, the shifting lever and emergency brake lever are inside the car in the center at the left of the driver. Notice on other fore-door makes the levers are outside, proving that the body is patched up with the fore-doors to meet the latest ideas. Model 51 has a thirty horse-power, four cylinder motor that is a marvel of efficiency, quietness and reliability. Dual ignition, magneto and battery, 110 in. wheel base, seats five people, tires 34x3½ in., three speeds reverse and selective. Brakes internal expanding, external contracting.

*Get in touch with the OVERLAND dealer nearest you and compare this car with others about this price. WRITE FOR CATALOG.*

**The Willys-Overland Company**

**163 Central Avenue TOLEDO, OHIO**



Model 51, (Fore-Door) 110 Inch Wheel Base, 4-Cylinder, 30 H. P. $1,250


# Farm Notes

## Home-Made Gasolene Tractor

IN OUR September 10th issue was published a description and photograph of a home-made gasolene tractor devised by Ben Mitchell, who lives near Shenandoah, Iowa. In response to inquiries regarding the details of the tractor's construction, Mr. Mitchell sends us the following explanation:

It is possible to convert a stationary gasolene engine into a tractor with very little outlay, for it is possible to use old gears and pulleys off old machinery of little value.

The driving pulley (A) on my engine is sixteen inches in diameter with a fourteen-inch face and is studded to the fly-wheel (B) of the engine by short bolts. This construction made it possible to employ a pulley of smaller diameter. One has to be careful in this matter of size of driving pulley, for if it is made too large, it necessitates either running the engine at slow speed or the use of too large a pulley (C) on the jackshaft (D).

The driving pulley (A) is connected with the jackshaft pulley (C) by the belt (E). Pulley (C) is twenty-four inches in diameter with eight-inch face, on my machine. When the engine is started, the driving pulley slips freely in the belt, which is a little loose until pressure is put on it by the "idler pulley" (F).

This idler pulley revolves on the crank shafting marked G. This crank is made from a straight bar shaft one and one fourth inches thick and about four feet long before bending. Bend eight inches at one end for idler pulley to work on (the part of shaft from 1 to 2 in the small sketch at top of diagram). Another twelve or thirteen inches goes into part of crank from 2 to 3, in sketch, and the remaining part of bar, from 3 to 4, goes through a hole in the sill of the frame of the tractor. If the crank shaft fits this hole snugly, no boxings are necessary. On the other side of the sill put a key-seated crank (X in the small sketch) on the crank shaft. The clutch lever bar (H) extends from this crank to the clutch lever (I), which can be placed anywhere that is handy to the operator. I fastened mine to one of the uprights that support the sheet-iron canopy I have over the machine (canopy not shown in the sketch).

Both the diameter of the driving pulley and jackshaft pulley govern the size of the idler, which is, on my tractor, about ten inches in diameter. The idler pulley must also be of suitable size to press on the belt not only when it is straight, but when it is twisted (crossed) for the purpose of backing the machine. (The engine cannot be reversed, so you must cross the belt in order to back). The length of the ratchets for the clutch lever (I) also helps in adjusting the idler properly in such cases.

Fasten the idler pulley on the crank very securely. This I did by boring a liberal-sized hole through the shaft, putting on a large-sized washer and then putting a bolt through the hole with lock nuts on it. Thus the pulley is perfectly secure. Should the idler pulley accidentally fly off, there would be no control over the belt, and the engine would be disconnected from the ground wheels.

I use stretched canvas belting, as it seems to take hold easier and yet firmer than other kinds, when the idler pulley is tightened.

Now that the power is transmitted to the jackshaft pulley (C) the next step is to key this pulley to the shaft (D). I not only used a key, but also drilled a hole through the shaft and pulley and placed a strong metal pin through the hole. This should be riveted if possible.

At each end of the jackshaft is a sprocket wheel. The near one is marked J. These sprocket wheels have eight teeth and are fastened to the shaft by means of a pin. Of course, in turning corners with the machine the pin must be removed from one sprocket to allow compensation to take place—that is, to allow one wheel to move faster than the other when the tractor goes around a curve.

The two ground wheels (M), the small sprockets (J) and the driving chains (N) all came from old binders. The large sprocket wheels (L) on the ground wheels (M) were the same ones used on the binders. The ground wheels are about thirty-six inches in diameter and have roller bearings in them.

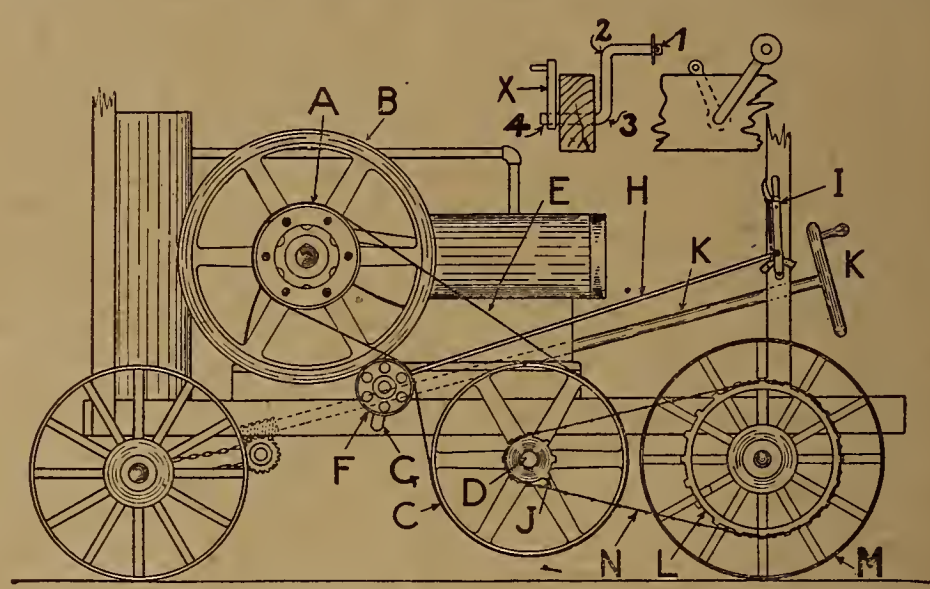
These ground wheels both turn on the rear axle, which is clamped to the engine frame. This shaft is made from an old tumbling shaft of a thresher. The sprocket wheels (L) are bolted and clamped to the ground wheels (M). As before stated both drive wheels are employed only on a straight road, and in turning curves the small sprocket (J) on one side is unpinned and power is applied to only one ground wheel.

My rear shafting is the same size as the shafting used in a binder and I have found that it is a trifle light for the weight placed upon it. The six-horse-power engine weighs about twenty-four hundred pounds. Owing to the heavy fly-wheels of the engine a little greater weight comes on the front than on the rear wheels.

The steering gear was made from an old wormer and sector taken from a manure-spreader, while the hand wheel (K) was from an old washing-machine. The steering gear is attached to the front axle in the way common to all tractors.

This tractor has not the power to pull heavy loads nor was it constructed for that purpose. The motive I had in view was simply to make the engine propel itself from place to place, though by a different selection of the size of the various gears considerable tractive power could doubtless be secured.

BEN MITCHELL.




## More From Our "Old Settlers"

AFTER our "old settler's page" was prepared for printing in our January 25th issue we heard from several others of our subscribers who had been with the paper from the first. Since that page was published, others have written to us. While we have not space to print the kindly letters they sent, we believe that an acknowledgment is due to these readers, who have almost all of them been with us for thirty-three years, or nearly that.

The following members of FARM AND FIRESIDE's Old Guard, then, have reported personally or by word of a relative.

| | |
|---|---|
| J. H. Ball | Maryland |
| C. B. Burton | Missouri |
| C. C. Campbell | Kansas |
| Mr. and Mrs. E. E. Colien | Wisconsin |
| Daniel Cooper | Pennsylvania |
| S. A. Fowkes | Pennsylvania |
| Mary J. Harbine | Indiana |
| Mrs. Elizabeth Hasson | Illinois |
| Mrs. M. S. Henning | Ohio |
| Mrs. D. M. Hickman | West Virginia |
| Mrs. W. D. Hull | Ohio |
| R. W. Jack | Maine |
| Henry Lewis | Colorado |
| G. K. Lycan | Montana |
| N. Morehead | Kansas |
| H. M. Olson, O. S. Olson | British Columbia |
| Mrs. E. Rowe | Louisiana |
| Mrs. Judith D. Russell | Virginia |
| C. E. Scroggs | Ohio |
| F. G. Smith | Texas |
| Otis Streeter, John O. Streeter | Washington |
| Mrs. Prudence Titus, Richard Titus | New York |
| Mary Jane Wilson | Idaho |
| Mrs. F. A. Woolverton | Oklahoma |

## Glad to Hear This!

I read description of rack-lifter while miles from home and resolved to have it made, and when I arrived at home two days later, behold! I found it in actual operation! And highly successful, too. You see, the folks at home had read the description one night and made the lifter next day. It was just what we were looking for, and not only cost nothing, but works easily and perfectly. So success to FARM AND FIRESIDE and to Bernard F. Dalzell.

I sent your editorial on parcels post to my congressman, M. D. Foster, at Washington, D. C.

LEO L. KINNEY.

The latest United States Department crop report states that Argentina has increased its acreage of wheat no less than a million acres.

By Judson C. Welliver

A CORRESPONDENT wrote to me from Pennsylvania the other day to protest that I found too much fault with things, but didn't often enough come through with sapient observations about how things ought to be done. He opined that I wasn't constructive enough; always found fault with the way things are being done, but never telling how they ought to be managed.

Of course, I don't admit anything of the sort. I feel awfully constructive. If there is any proposition in statecraft on which I haven't ideas, a policy, even a program, of my own, I should like to see it. I may be wrong, but you can count on me to have a plan.

Somehow, I doubt whether the United States Senate has much on me in this matter of constructiveness. Congress adjourned the other day, after struggling for the better part of three months with the question of how senators ought to be elected and how they are. It had a fine chance to consider how they are elected and, if it liked, to prescribe some reforms in the manner of electing them.

And when it got done it had vindicated Lorimer and voted down a proposition for popular election of senators!

You people who read the Washington despatches may be for Lorimer, although I don't believe it. If you are, I should like to sit down with you, one or two or three at a time, for an hour, and tell you about the Lorimer case. I think you would get over it, if you would listen to the facts, read the record, study the law.

But the senate voted in favor of Lorimer.

### The Cure for the Lorimer Habit

IF I criticize the senate for doing that, my friend who thinks I am not constructive enough—don't suggest remedies for evils—will perhaps demand to know what I would do about it. Well, I am going to tell what Congress ought to have done about it, and didn't do, and why. Most people seem firmly convinced that affairs like this Lorimer case are not desirable. We can all agree on that without very much conversation. As to what ought to be done about it, about the same proportion of people think that popular election of senators, directly by the people instead of by the legislatures, would be the right remedy.

The Lorimer case pretty nearly ruined the last session of Congress. A long series of important measures were pressing for action. Most of them failed, and the most significant reason why they failed was the Lorimer case.

President Taft wanted action on his Canadian reciprocity measure. He didn't get it, because the Lorimer case had the right of way and took up so much time that there was none left to consider reciprocity.

Progressives, both Democrats and Republicans, wanted a permanent tariff commission established. A bill providing for it was introduced in the Senate and duly reported. Weeks before the end of the session it was known that a majority of senators would vote for it if they ever got a chance. But the Lorimer case was kept everlastingly at the front and no opportunity was given to vote on the tariff commission bill until three hours before noon of March 4th, when the session would expire by law. Then, and only then, the tariff commission bill passed the Senate.

### Lorimer Plus Cannon Equals No Tariff Commission

BUT it was so late that the House did not have time to pass it. It could have been forced through the House if the old Cannon organization had been sincere in the desire to make it a law. Indeed, there was pretense of a determined effort to pass it; but it was only pretense, and the organization, all the while going through strenuous movements which indicated purpose to force a vote before the adjournment hour, was, in fact, lending itself to a carefully-laid plan to defeat it. Talk and parliamentary ghost-dancing held up the bill until the clock showed that it could not be voted upon without blocking appropriation bills of vital importance. So the tariff commission measure was withdrawn, and expired quietly in an obscure corner.

It is the very general belief that Mr. Lorimer was sent to the Senate because of his eminently dependable character as a bulwark against progressive legislation. As has been pointed out editorially in FARM AND FIRESIDE, the Lorimer investigation, as conducted by the Senate, has blocked such legislation far more effectively than anything Mr. Lorimer himself could have done. But it was not only distinctively progressive measures which were crowded out of senatorial consideration by the Lorimer case. It is hard to tell how many measures were incidentally lost in the shuffle.

The Sulloway bill to increase the pensions of Union veterans of the Civil War passed the House and in all probability would have passed the Senate if it could have been brought to a vote. The Lorimer case took so much time that the Sulloway bill never got within gunshot of a vote in the Senate. The House passed a bill to reapportion representation of the states on the basis of the census figures for 1910. The bill went to the Senate and died there. It ought to have passed. It died because there was not time enough, in the last hours of the session, to act on it. The Lorimer case had got all the time.

So, when it was all over, Lorimer had been seated by a majority of 46 to 40. Practically everything else except the appropriation bills had been killed. That is what the country sacrificed, in order that William Lorimer might keep his seat in the Senate. You have all read a good deal about the Lorimer case. You can judge just as well as I whether it was an excessive price to pay for four more years of Lorimer. I think it was.

Now, there would be no more such scandalous cases as this of Lorimer if senators were elected by direct vote of the people. So if you want to know my remedy for such cases, I will prescribe popular election of senators. But how are we to get it when the Senate votes down popular elections and votes up William Lorimer?

As a matter of fact, this juxtaposition of Lorimer and popular elections did more than almost anything else that could be imagined to further the cause of popular elections. The Lorimer case had reminded the country of the pressing need for direct elections. It isn't much wonder that a wave of real indignation swept over the country when the news came that Lorimer had won. I am going to give you the two roll-calls of the Senate, on Lorimer and popular elections. Look them over; check up the lists and observe what senators voted for Lorimer and against popular elections. The next time you go to an election, you will be able to do yourself and your country a service, if you can get the chance to vote against any of these gentlemen.

### Lorimer's Senators and People's Senators

THOSE who voted in favor of seating Senator Lorimer were: Republicans—Bradley, Brandegee, Briggs, Bulkeley, Burnham, Burrows, Carter, Clark of Wyoming, Crane, Cullom, Curtis, Depew, Dick, Dillingham, DuPont, Flint, Frye, Gallinger, Gamble, Guggenheim, Hale, Heyburn, Kean, McCumber, Oliver, Penrose, Perkins, Piles, Richardson, Scott, Smoot, Stephenson, Warren, Wetmore. Democrats—Bailey, Bankhead, Fletcher, Foster, Johnston, Paynter, Simmons, Smith of Maryland, Tillman, Thornton, Watson.

Those who voted against seating Lorimer were: Republicans—Beveridge, Borah, Bourne, Bristow, Brown, Burkett, Burton, Crawford, Cummins, Dixon, Gronna, Jones, La Follette, Lodge, Nelson, Page, Root, Smith of Michigan, Sutherland, Warner, Young. Democrats—Bacon, Chamberlain, Clarke of Arkansas, Culberson, Davis, Gore, Martin, Money, Newlands, Overman, Owen, Percy, Rayner, Shively, Smith of South Carolina, Stone, Swanson, Taylor.

Not voting: Aldrich, Republican, Rhode Island; Frasier, Democrat, Tennessee; Lorimer, Republican, Illinois; Terrell, Democrat, Georgia; Taliaferro, Democrat, Florida.

Total vote for Lorimer, 46. Total vote against Lorimer, 40.

Speaking for myself only, and attempting a measure of candor which I trust will not be too veiled, I may say that I think any one of the senators, Republicans or Democrats, who voted for Lorimer could very well be spared from the service of their country. And I don't put it on the ground of this vote alone. This Lorimer vote is only an incident. It merely happens that the men who voted in favor of Lorimer constitute, in a general way, the element that always has to be "licked" when the things I believe in win, and that always wins, when the things that I believe in are "licked." They are the same gentlemen who always view with alarm propositions to strengthen the laws regulating railroads or trusts, who firmly insisted that Theodore Roosevelt was a dangerous person and whose general course indicates a pretty firm conviction that a man with $1,000,000 is good, a man with $2,000,000 is twice as good, a man with $10,000,000 is ten times as good and a man with a billion dollars is just naturally too good for any mere human person to think of regulating him.

Now let us turn to the other side, to the roll-call on the resolution to amend the constitution so that senators might be elected directly by the people. It takes a two thirds vote of the Senate to pass such a resolution. There being now ninety-one senators, sixty-two votes were necessary to pass this resolution. It got fifty-four, while thirty-three were cast against it. Some undesirable statesmen voted in favor of the resolution; but no very desirable ones voted against it.

### The Roll-Call on Direct Election of Senators

THOSE who voted for it were: Republicans—Beveridge, Borah, Bourne, Bradley, Briggs, Bristow, Brown, Burkett, Burton, Carter, Clapp, Clark of Wyoming, Cullom, Cummins, Curtis, Dixon, DuPont, Frye, Gamble, Gronna, Guggenheim, Jones, La Follette, McCumber, Nelson, Nixon, Perkins, Piles, Smith of Michigan, Stephenson, Sutherland, Warner, Watson, Young. Democrats—Bailey, Chamberlain, Clarke of Arkansas, Culberson, Davis, Gore, Martin, Newlands, Overman, Owen, Paynter, Rayner, Shively, Simmons, Smith of Maryland, Smith of South Carolina, Stone, Swanson, Taylor, Thornton.

Those who voted against the resolution were: Republicans—Brandegee, Bulkeley, Burnham, Burrows, Crane, Depew, Dick, Dillingham, Flint, Gallinger, Hale, Heyburn, Kean, Lodge, Lorimer, Oliver, Page, Penrose, Root, Scott, Smoot, Warren, Wetmore. Democrats—Bacon, Bankhead, Fletcher, Foster, Johnston, Money, Percy, Taliaferro, Tillman.

If the resolution for popular election of senators had passed, it would have put an end to cases like that of Lorimer. That is the only remedy I have to offer for Lorimer cases. Give us direct elections and there will be little occasion and less opportunity for them. The Senate will not find it necessary to devote most of its energies for an entire session to vindicating such men as Lorimer. On the other hand, state legislatures will not find it necessary to give up most of their energies for entire sessions to the election of such men as Lorimer.

So we would gain in three ways. The Senate could attend to its proper business, the legislatures could attend to theirs, and the country at large would be relieved of the humiliation incident to realizing that it was being misrepresented in such fashion.

If that isn't a constructive proposal, I give it up. I have pointed out what I think is an evil, and suggested what I think is the proper remedy, and a remedy, which if applied, will hereafter prevent a single gentleman and his colleagues from keeping at bay the will of the people.

### Extra Sessions Pay

THE last session of the Sixty-First Congress ought to have transacted a record-breaking amount of highly important business for the benefit of the country. It failed, very largely because the Senate was compelled to waste its time on the Lorimer case.

In that connection, just one more observation. It is peculiarly popular, especially among the humorous paragraph writers, to bemoan the fact that Congress is to hold an extra session. The most diligent effort is devoted by a lot of small minds, to make it appear that every day of Congress' sitting is a national calamity. It is really a worn-out joke, which ought to be shelved. We have about eight months of Congress sessions every two years, and the fact is that it isn't time enough to get the country's business done. We need more of Congress, rather than less. This country has not fairly started on a consideration of many questions that other countries are in the way of solving. Congress is paid to work at them, and it is paid whether it is in session or not.

There is a widely prevalent idea that an extra session is tremendously expensive. It is nothing of the sort. Congress costs just about as much whether it is working or not. We pay it to work, and at present we are not getting the work done. We ought to be glad, instead of cynical, at the prospect of getting a few days' extra work out of it.

# How Springtime Came to Rocky Glen

## An Easter Story—By Izola Forrester

Illustrated by Robert A. Graef

"You didn't expect me, did you?"

Mrs. Taggart wiped her hands on her apron tremulously and pushed her spectacles a little farther up to get a good look at the speaker. She could not quite trust herself to speak yet.

Down the winding hill road that led to the valley there came the creak of the old double wagon used as a stage at the depot. And standing in the doorway under the white porch was Rocky Glen's Easter guest.

Young she was, and sweet as the very breath of spring, with eyes so blue, so brimful of dancing happiness and love and all things that make spring joyous that she seemed like the incarnation of it all to the tired, lonesome eyes that gazed at her hungrily.

"Land alive," breathed Mrs. Taggart finally. "It's Bess, ain't it? Why, child, how you have grown!"

Bess Clifford laughed, as she dropped a suit-case on the kitchen floor and gave her a hearty hug and kiss.

"Course I've grown. It's seven years since I came up here. Don't you remember, Aunt Roxy, what a funny, skinny little kiddie I was, and how I got into trouble all the time? I saw the apple-tree as we drove by, where I climbed up to the blackbird's nest, and fell. And Rob caught me."

She bent down to unfasten the straps on her suit-case. Mrs. Taggart could not see the flush that stole over the young face as she asked quite innocently, "Is Rob home for Easter, Aunt Roxy?"

"He had to be, dearie. Pa's been terribly poorly lately. Rob left college along in February, and came up home and took hold of things. He's up in the fields now, plowing."

"Oh, I didn't know Uncle Ben was so sick."

Bess sat back in consternation, pushing her hair from her face, as she dropped her big hat behind her. "I should not have come at all. But, oh, dear Auntie, you just don't know what spring does to you when you live in a big city like New York. It tugs and grips you, and makes you feel as if you must fly or burst, or do something desperate.

"I've sat and taught those blessed kindergarteners of mine day after day, and watched the spring creep along, till I wanted to dance and sing right in class. And the darlings would bring me flowers every morning. Daffodils and violets and jonquils, and last week one tot actually came with a bunch of arbutus. Arbutus, Aunt Roxy, think of it! Why, I put my nose down to it and shut my eyes and came right up to the hill pasture above the mill, and there it was growing in bunches all around the rocks where Rob and I used to pick it. And that's why I'm here. Truly. I couldn't stand the arbutus' call. I just packed up what I needed and flew up for a week. You don't mind, do you, dear?"

Mind! Roxana Taggart folded her arms around the girl closely and pressed her cheek against the bright soft hair that made her think so much of another young fair head. Bess was the only child of Roxana's dearest girl friend, whom she loved as a sister. Sue had died at Bess' birth. Roxana had kept Bess with her for ten years, at the lonely gray house at the head of Rocky Glen, and then the child had gone to her father in New York to be educated. It had been good for her. She had received a thorough schooling and had taken up kindergarten work afterward, but the letters to Rocky Glen had never stopped, nor its place filled in her heart.

"I've always been glad that Rob could run down and see you from New Haven," Mrs. Taggart said, as she wiped her eyes and began to make a cup of tea. "We kept track of you that way."

"Yes. I—I enjoyed his visits, too." Again Bess was very busy over the suit-case contents. It appeared that toilet articles and kimonos and shirt-waists demanded much attention at times. "He's getting on so well, too. Where's Uncle Ben? In the bedroom off the sitting-room?"

Mrs. Taggart's lips shut in a prim, close line as she nodded her head, but Bess did not understand. She went into the large sunny sitting-room, with its old-fashioned furniture and rag carpet, and every glance at things familiar was a caress.

Just for a minute she paused to look around. There was the tall wall closet, where she had hidden herself once, 'way up on the top shelf, when Rob was hunting her. There was the queer old Dutch stove, with its blue and white tiles set in around the top, tulips and windmills and canal-boats. How she had loved those tiles! And the tall clock between the windows, with the round window to show the pendulum, and the climbing roses all the way to the top. She listened to its ticking now. Surely clocks ticked much slower out here at Rocky Glen than they did in New York.

But in spite of the old familiar objects that touched her memory there was a strange chill about the room that she could not but feel. It looked bare. There were no flowers, no plants anywhere. The table was clear of any books or magazines. Every chair was in place. It looked like a dead room that no one lived in. She shivered and laughed, and went softly into the adjoining bedroom.

" 'It's your future daughter pleading, dad,' said Rob gently, as he bent over the old man"

It was a small room, with only a bed and chest of drawers in it, and a couple of chairs. The shade was half drawn at the window. It smelt close and musty and—yes, old. Propped up on pillows in the center of the bed was Uncle Ben Taggart, eighty-one, and as Mrs. Taggart used to say, "the settingest man in his ways this side of kingdom come."

His eyes were closed, and his clean-shaven mouth was closed, too, firmly and resolutely above his chin with its little pointed white beard.

Bess knelt beside the bed and took his two thin hands in hers.

"Uncle Ben," she said, in her clear, sweet voice. "Wake up. Don't you know it's Easter-time and spring's here?"

"Well, I swan," murmured the old fellow, as he looked down at her sleepily, and then, slowly, doubtfully, for the first time in many days, he smiled and patted her head. "It's Bessie, ain't it? Did you come up for the funeral?"

"Whose funeral?" Bess asked, her eyes full of fun. "Winter's?"

The old man chuckled and sat up.

"No. Mine. Ain't Roxy been telling you she's waiting for me to die off? She's pestered me and drove me for years till I can't abide it any longer, Bessie. I've took a vow and I'll keep it, too."

"A vow, Uncle Ben?" asked Bess innocently.

"Yep. I had a great-granduncle once up Taunton way. He took a notion one day he wouldn't be drove any longer, and he went to bed and stayed there till he died. I've been here in this bed since the tenth day of February and getting weaker all the time."

Bess sat down on one of the little black walnut chairs, and looked at the determined old face. Dearly would she have loved to shake him.

Rob had written her the whole affair. Aunt Roxy was as resolute and stubborn in her way as Uncle Ben in his, and after years of friction and "set-tos," the old man had finally rebelled against being "driven," as he called it, and with all the spirit of the Taggarts to back him up, he had gone to bed to die, just to spite Roxy, as he said.

Only in old New England are such spirits bred, spirits that seem to be born as granite-ribbed and unbending as the rocky hills, spirits with all the blind doggedness of a line of Calvinistic ancestors. Bess knew full well, as she sat there, that the old fellow was quite capable of staying right in that bed and starving himself out of existence, on principle.

So Rob had written her desperately and begged her to come and find a way out. He had been compelled to leave college and come home, and his mother was worrying herself sick over the situation, yet neither would speak to the other, and neither would give in one iota.

"Don't you love her any more, Uncle Ben?" asked Bess softly. Some way it was all she could think of to say.

"Course I love her," answered the old man, testily. "Ain't she my wife, Bessie? But I won't be put upon by nobody, nor hectored. I've stood it long enough."

"Don't you want me to open the window, dear? It's so sunny and lovely outdoors."

"No, you needn't tech it. I don't want any sunshine in. She'll be saying I faded her bed-quilt if I do."

Bess went out with an ache in her heart and a smile on her lips. It was funny. It was sad and pathetic, but it was funny, too, the thorough enjoyment he took out of being miserable. She slipped out of a side door, instead of going back through the kitchen, and took the old criss-cross cut through the garden up to the rye-field.

It was such a glorious day, this day before Easter. The air was so fragrant and warm. Bess stopped at the top of the hill to catch her breath, and looked back at Rocky Glen. It was aptly named. The house stood just off the main road, on a little drive of its own. It backed right up against the tumbled gray rocks behind it, and the ferns grew thickly up to the doorstep. It was gray and old and "set in its ways," just like the Taggarts, and Taggarts had lived in it long before the shot at Lexington caught the echoes above the glen.

The drive led past the little blacksmith shop and barn, down to a sawmill. It was silent now, as though it, too, had taken a vow like its owner, but Bess remembered how she had loved its singing years before. Above the dam was the smooth lily-pond, and in dry weather you could climb out over the great brown rocks of the dam and play all kinds of games. The alders fringed the banks, and willows trailed clear over into the water. Now the water was tumbling in a creamy cascade over the dam, and you could hear the roar of it up through the glen.

And all at once, while she stood there, listening to it, two arms were folded around her, and her head was laid back on Rob's shoulder.

"You darling, to come when I needed you," he said after a minute. "I haven't told even mother. I wanted it to be her Easter gift. Have you seen my dad?"

Bess nodded. Indeed she had seen dad, and right then and there she sat down on the rocks, where the arbutus clustered in the clefts, and laid the plot that brought springtime to Rocky Glen and its frozen hearts, while Rob picked the arbutus and filled her lap with it.

It was a loving plot, but a mighty one, and Rob agreed to it fully. All that afternoon they two tramped the spring woods, followed the brook and brought back flowers, ferns, violets, Hepaticas, trillium, bluets, wood anemones and even Jacks-in-the-pulpit, bellwort, marsh marigolds and branches of wild cherry. That night they trimmed the sitting-room and opened the windows. It was a bower of spring loveliness when they had finished. Mrs. Taggart watched them with tearful eyes.

"It's beautiful, but it won't touch him a mite," she said, over and over again. "He's that set that if he makes up his mind to die, the Lord Himself can't turn him."

"Yes, He can, dear," Bess replied, as she stood up on a chair to hang cherry blooms over Uncle Ben's door. "If He can take the frozen world and make it bloom like this, can't He do it to hearts as well, with the touch of love? Just wait. Rob will carry him out here, and don't you mind if he does kick, Rob. Bring him out and let him see it all, and then we'll tell him about ourselves, and then—then we'll leave him to Aunt Roxy."

"And what will I do?" asked Mrs. Taggart mournfully. "He says he can't abide me."

"He told me to-day he loved you," Bess answered. "You must just put your arms around him like this."

And she jumped down and hugged the old lady.

Easter morning dawned fair and radiant. There was a hush in the glen, as though all its little world of birds and flowers listened for the step of the risen Lord.

Rob went in as usual to take his father his breakfast, but this time he simply bent down and lifted the old man, bedclothes and all, and bore him, protesting and scolding, out into the sunny, flower-filled sitting-room, where Bess and Mrs. Taggart waited. Down in the big rocker Rob placed him, and Bess knelt at his feet, holding out a great bunch of white violets.

"Happy Easter, Uncle Ben," she cried. "Don't you feel resurrected? Don't you see how we all love you and want you. Don't you want to get out into this sunshine, and feel good and full of joy and gladness?"

"It's your future daughter pleading, dad," said Rob gently, as he bent over the old man. "I've always loved Bess since she lived up here in the glen, and she's going to be my wife before the laurel blooms. But we couldn't feel right with you in bed and wanting to die."

Then Ben Taggart glanced up and met Roxy's eyes. It was not resentment he saw there, but pleading for the happiness of the two she loved. He raised the bunch of white violets to his nose.

Out on the flowering currant-bush a bluebird was pouring out an anthem of joy. All the awakened world called to the spirit to rise and follow its risen Lord. Uncle Ben laid one hand on Bess' head and smiled.

"I guess I'll get up, mother," he said.

# An Easter Carol

## Written Exclusively for Farm and Fireside

By G. Mathews

Moderato

Joy fills the dwell-ing of the just, Whom God has saved from harm; For won-drous things are
That which the build-ers once re-fused, Is now the cor-ner stone: This is the won-drous
O then with me give thanks to God, Who still does grac-ious prove; And let the trib-ute

brought to pass By his al-might-y arm. Then op-en wide the tem-ple gates To
work of God, The work of God a-lone. This day is God's; let all the lands Ex-
of our praise Be end-less as his love. Then op-en wide the tem-ple gates To

which the just re-pair, That I may ent-er in and praise My great de-liv'-rer
alt their cheer-ful voice, "Lord, we be-seech thee, save us now, And make us still re-
which the just re-pair, That I may ent-er in and praise My great de-liv'-rer

there, That I may ent-er in and praise My great de-liv'-rer there.
joice." "Lord, we be-seech thee, save us now, And make us still re-joice."
there, That I may ent-er in and praise My great de-liv'-rer there.

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# The Room of Many Shadows

## The Great Mystery Surrounding Four Oaks Tavern

By Anna Katharine Green

Author of "The Millionaire Baby," "The Leavenworth Case," "The Mayor's Wife," Etc.

Part I.

"What door is that? You haven't opened that door."

"Oh, that! That's only Number 7. A mere closet, gentlemen," responded the landlord in a pleasant voice. "To be sure, we sometimes use it as a sleeping-room when we are hard pushed. Jim, the clerk you saw below, used it last night. Do you want a peep at it?"

"We would. As you know, it's our duty to see every room in this house."

"All right. I haven't the key of this one with me. But—yes, I have. There, gentlemen!" he cried, unlocking the door and holding it open for them to look inside. "You see it no more answers the young lady's description than the others do. You have now seen all the rooms in front, and this is the last one in the rear. You'll have to believe our story. The old lady never put her foot in this tavern."

The two men he addressed peered into the shadowy recesses before them, and one of them, a tall and uncommonly good-looking young man of stalwart build and unusually earnest manner, stepped softly inside. He was a gentleman farmer living near, recently appointed deputy sheriff on account of a recent outbreak of horse-stealing in the neighborhood.

"I observe," he remarked, after a hurried glance about him, "that the paper on these walls is not at all like that she describes. She was very particular about the paper; said that it was of a muddy pink color and had big scrolls on it which seemed to move and crawl about in whirls as you looked at it. This paper is blue and striped. Otherwise—"

"Let's go below," suggested his companion, who, from the deference with which his most casual word was received, was evidently a man of some authority. "It's cold here, and there are several new questions I should like to put to the young lady. Mr. Stetson," this to the landlord, "I've no doubt you are right, but we'll give this poor girl another chance."

"My reputation is in your hands, Coroner Gray," was the quiet reply. Then, as they both turned, "my reputation against the word of an obviously demented girl."

The words made their own echo. As the third man moved to follow the other two into the hall, he seemed to catch this echo, for he involuntarily cast another look behind him as if expectant of some contradiction reaching him from the bare and melancholy walls he was leaving. But no such contradiction came. Instead, he appeared to read confirmation there of the landlord's plain and unembittered statement. The dull blue paper with its old-fashioned and uninteresting stripes seemed to have disfigured the walls for years. It was not only grimy with age, but showed here and there huge discolored spots, especially around the stove-pipe hole high up on the left-hand side. Certainly he was a dreamer to doubt such plain evidences as these. Yet—

Here his eye encountered Stetson's, and pulling himself up short, he hastily fell into the wake of his comrade now hastening down the narrow passage to the wider hall in front. Four Oaks Tavern has been long forgotten, but at the time of which I write it was a well-known but little-frequented house, situated just back of the highway on the verge of the forest lying between the two towns of Farnhurst and Cherry Creek in southern Iowa. It was of ancient build, and had all the picturesqueness of age and the English traditions of its original builder. Though so near two thriving towns, it retained its own quality of apparent remoteness from city life and city ways. This in a measure was made possible by the nearness of the woods which almost enveloped it, but the character of the man who ran it had still more to do with it, his sympathies being entirely with the old, and not at all with the new. This, while it appealed to a certain class of summer boarder, did not so much meet the wants of the casual traveler, so that while the house might from some reason or other be overfilled one night, it was just as likely to be almost empty the next, save for the faithful few who loved the woods and the ancient ways of the easy-mannered host. The building itself was of wooden construction, high in front and low in the rear, with gables toward the highway, projecting here and there above a strip of rude, old-fashioned carving. These gables were new, that is, they were only a century old; the portion now called the extension, in the passages of which we first found the men we have introduced to you, was the original house. Then it may have enjoyed the sunshine and air of the valley it overlooked, but now it is so hemmed in by yards and outbuildings as to be considered the most undesirable part of the house, and Number 7 the most undesirable of its rooms, which certainly does not speak well for it.

But we are getting away from our new friends and their mysterious errand. As I have already intimated, this tavern had for its southern aspect the road and a broad expanse beyond of varied landscape which made the front rooms cheerful even on a cloudy day; but it was otherwise with those in the rear and on the north end. They were never cheerful, and especially toward night were frequently so dark that artificial light was resorted to as early as three o'clock in the afternoon. It was so to-day in the remote parlor which these three now entered. A lamp had been lit, though the daylight still struggled feebly in, and it was in this conflicting light that there rose up before them the vision of a woman, who seen at any time and in any place would have drawn, if not held, the eye, but seen in her present attitude and at such a moment of question and suspense, struck the imagination with a force likely to fix her image forever in the mind, if not in the heart, of a sympathetic observer.

I should like to picture her as she stood there, because the impression she made at this instant determined the future action of the man I have introduced to you as not quite satisfied with the appearances he had observed above. Young, slender but vigorous, with a face whose details you missed in the fire of her eye and the wonderful red of her young, fresh but determined mouth, she stood, on guard as it were, before a shrouded form on a couch at the far end of the room. An imperative *Keep back!* spoke in her look, her attitude and the silent gesture of one outspread hand, but it was the *Keep back!* of love, of tenderness, not of fear, the imperative command of an outraged soul, firmly conscious of its rights and instinctively alert to maintain them.

The landlord at sight of the rebuke thus given to their intrusion, stepped forward with a conciliatory bow.

"I beg pardon," said he, "but these gentlemen, Doctor Gray, the coroner from Farnhurst, and Mr. Rodney, wish to ask you a few more questions about your mother's death. You will answer them, I am sure."

" . . . he was on his feet . . . the tavern was not only on fire, but on fire directly under him"

"I am anxious to do so," she said, in a voice rich with many emotions. But seeing the open compassion in the landlord's face, the color left her cheeks, almost her lips, and drawing back the hand which she had continued to hold outstretched, she threw a glance of helpless inquiry about her which touched the younger man's heart and induced him to say:

"The truth should not be hard to find in a case like this. I'm sure the young lady can explain. Doctor Gray, are you ready for her story?"

"Yes, we will hear what she has to say, of course, but the facts are well known. The woman she calls mother was found early this morning lying on her face in the adjoining woods quite dead. She had fallen over a half-concealed root, and with such force that she never moved again. If her daughter was with her at the time, then that daughter fled without attempting to raise her. The condition and position of the wound on the dead woman's forehead, together with such corroborative facts as have since come to light, preclude all argument on this point. But we'll listen to the young woman, notwithstanding. Did not your mother die in the woods? No hocus-pocus, miss, but the plain, unvarnished truth."

"Sirs," the term was general, but her appeal appeared to be directed solely at the one sympathetic figure before her, "if my mother died in the woods—and she may have for all I can say—it was not till after she had been in this house. Any other story told by anyone else whomsoever is false. She came to this house in my company, and was given a room and went into this room. I saw it and I saw her in it. I cannot be deceived in this."

"Mr. Stetson, did Mrs. Williams come to the house with Miss Williams?" inquired Rodney of the silent landlord.

"She says so," was the reply, accompanied by a compassionate shrug which spoke volumes. "Ask Jim, who was in the office all the evening. Ask my wife, who saw the young lady to her room. Ask anybody and everybody who was around the tavern last night. I'm not the only one to say that Miss Williams came in alone. All will tell you that she arrived here without escort of any kind; declined supper, but wanted a room, and when I hesitated to give it to her, said in way of explanation of her lack of a companion that she had had trouble in Farnhurst and had left town very hurriedly for her home. That she had telegraphed to her mother to meet her somewhere on the road, and that it was then likely that their place of meeting would be at Four Oaks. That if this should occur; if a white-haired lady should arrive and ask for her, she was to be notified at once: but if a gentleman came and put the same question, I was to be very careful not to admit that any such person as herself was in the house, and she asked that her name be left off the register—a favor which I granted, as you can see for yourselves."

"Oh," came in indignant exclamation from the young woman before them. "I understand my position now. This man has something to hide, or he would not take to lying about little things like that. I never asked him to allow me to leave my name off the register. On the contrary I wrote my name in it and my mother's name, too. Let him bring the book here and you will see."

"We have seen," responded the coroner. "We looked in the register ourselves. Your names are not there."

"Not there?" fell from her lips in a frozen monotone as her eyes grew fixed upon the faces before her and her hand went groping around for some support.

Mr. Rodney approached with a chair.

"Sit," he whispered. "You shall have every consideration. Only tell the truth."

She may have heard his words, but she gave no sign of comprehending them. She was following the movements of the landlord, who had slipped out to procure the register, and now stood holding it out toward the coroner.

"Let her see for herself," he suggested, with a bland, almost fatherly air.

Doctor Gray took the book and approached Miss Williams.

Neither her nor her mother's name was there.

"Yes, yes, I see," she admitted. "Yet I wrote my name in the book! Or is it all a monstrous dream!"

The coroner returned the book to the landlord.

"Is this your only book?" he asked.

"The only book."

Miss Williams' eyes flashed. Rodney, who had watched this scene with intense interest, saw, or believed that he saw, in this flash the natural indignation of a candid mind face to face with arrant knavery. But when he forced himself to look at the man she confronted, to mark the equal directness of his gaze and the strange mingling of good humor with the active intelligence of an uncommonly keen intellect in his peculiar and possibly not really contradictory features, he did not know what to think. Both wore an aspect of self-confidence. She showed the lesser poise. Yet her tones rang true as she cried:

"You made up one story, you may well make up another. I demand the privilege of relating the whole occurrence as I remember it. Then you can listen to him."

"We desire nothing better," returned the coroner.

"I shall have to mention a circumstance very mortifying to myself," she continued, with a sudden effort at self-control, which commanded the admiration even of the coroner. "My one adviser is dead," here her eyes flashed for a moment toward the silent form behind her. "If I make mistakes, if I seem unwomanly—but you have asked for the truth and you shall have it, all of it. I have no father. Since early this morning I have had no mother. But when I had, I found it my duty to work for her as well as for myself, that she might have the comforts she had been used to and could no longer afford. For this purpose I sought a situation in Farnhurst and found one in a family I had rather not name. My mother lived in Cherry Creek. Anybody there will tell you what a good woman she was. I had wished her to live in Farnhurst, that is, at first; later, I—I was glad she didn't, but she had been born in Cherry Creek, and could not accustom herself to strange surroundings. Once a week I went home, and once a week, usually on Thursday, she would come and meet me on the highroad, and we would have a few words. Once we met at this tavern, but no one seems to remember. I was very fond of my mother and she of me.

[CONTINUED ON PAGE 26]

# The Home Interests' Club

## By Margaret E. Sangster

As every woman knows, one of life's greatest comforts is the privilege of talking freely with another woman of congenial tastes. When a neighbor drops in to compare notes over the latest cut of sleeves, the newest recipe for sponge-cake or the best way to raise money for renovating the church cushions, the work on hand is suspended and the two drift into that happy gossip in which intimate friends indulge. In this gossip there is no malice. There is only the charm of kind feeling and the expression of good wishes for those whose names happen to be mentioned.

The woman is to be pitied who has no neighbors near enough for this pleasant intimacy. When she must harness up, array herself in her good clothes and drive several miles to spend an afternoon with a friend or kinswoman, a little more effort is involved and there must be more planning before and after. This, too, makes a welcome break in the tedium of busy days, one very much like another, and each full to the brim of those petty details that cannot be neglected and yet make no perceptible showing and are passed over unobserved by the family. A wife may have spent years of perfect comradeship with her husband, may realize to a far greater extent than on her wedding day that he is without a flaw, and still she may suffer from ennui if limited to him as her sole companion.

There is a chance somebody who is reading this may smile at the recollection of the times without number when she has settled down for an hour of feminine chat with a casual visitor and has been half amused and half exasperated at the sight of her good man calmly coming forward, beaming and benignant and tranquilly taking a seat to join the conversation. The duet was all right, the trio was all wrong. The man may be adorable, but his masculine presence effectually puts a damper on the small talk of the women and so modifies the interview that the caller goes away at the evening's close without having heard or said a word that was wholly satisfactory. There are times and seasons when women prefer their own society to that of the men they love. Even as there are times when men arrive at their fullest social enjoyment without the company of women.

### The Advantage of Living in the Country

Home interests naturally absorb husbands and wives, and no home in the truest sense can grow and prosper unless both sexes are represented within its walls. Nevertheless, the man's province is with outdoor business, and the woman manages the home economy. An endless variety of subjects attracts the attention of the woman who lives in the country. She is fortunate beyond her city cousin in a certain aloofness from indifferent crowds, and above all she is fortunate in her freedom from the glare, noise, dust and incessant interruption that are inseparable from narrow streets and the roar of traffic.

You whose home is on a farm with meadows, orchards and pasture-lands, with brooks, trees and great spaces of sky, are a thousand times better situated for health, cheer and real luxury than your friends who are domiciled in big apartment-houses with little sunlight, no views except other houses and neighbors to whom your personality is unknown.

I once spent a very enjoyable evening in just such an apartment-house. As the guests took leave at a late hour their way was blocked for an instant by a group of people heavily climbing the stairs, in deep mourning. As the veiled crowd passed us and turned the latch-key on a higher landing, our hostess remarked, "The baby must have died. They seem to be returning from a funeral. I knew there had been illness up-stairs, but I am not acquainted with the people and did not like to intrude by inquiring." This was a commentary on the solitude of city life. In the loneliest countryside there is seldom quite such desolation.

What you and I need, no matter where we dwell, is to come into vivid actual touch with the life of the world, withdrawing from it into our own privacy as often as we choose. She who lives entirely to herself will surely grow narrow and self-centered. She who lives altogether for and with her children will not so successfully impress them as if her character were broadened and deepened by contact with outside affairs.

Perhaps you have known days when life seemed flat and flavorless, when you wanted something interesting to happen, and nothing did. I have.

> EDITOR'S NOTE—Perhaps you need a new friend—someone you can trust and talk to.
>
> Or, perhaps you feel you have so many old friends that you can't spare one moment out of your busy day for a new friend.
>
> Well, in either case I want you to know Mrs. Margaret Sangster, so let me introduce you to her.
>
> If you do need a new friend, she will prove just that friend you have been looking for.
>
> And if you have friends in plenty, you are pretty apt after all to include her among them. You just can't help yourself as soon as you have had a little talk with her.
>
> Mrs. Sangster wants to know you. By her long years of experience she is especially fitted to be the friend of American women. She has a sympathetic and yet common-sense understanding of the many problems that confront the busy woman. Her books on Home Life deal with not only the questions that are near to the heart of every woman, but to the many complex problems of the home. Mrs. Sangster's advice is worth hearing and following whether you are a young girl or a grandmother.

Possibly I am addressing here or there a woman who is tired. Few of us escape fatigue through the thraldom of housekeeping and under the responsibility of home-making. Easter comes with songs of birds and flowers in bloom, with the spring sewing and plowing, the spring painting and papering, the new frocks for the children, the suits to be bought for the boys, the hats to be trimmed, the anthems to be uplifted in the churches and, lo! we have spring fever and are too weary fully to enjoy the coronation of the year.

The doctor says we need a tonic. Or perhaps he prescribes a change of scene. We cannot always avail ourselves of the latter prescription and the tonic is bitter, and just when we ought to take it the bread is burning in the oven, a peddler knocks at the door or the telephone rings and we forget the bottle and the spoon. Now at this crucial moment I am venturing to make a suggestion. I want you to consider it favorably if you can, and in any event let me know what you think of it.

### An Informal Club

Do you or do you not believe in the woman's club? Had this question been asked when your mother was a girl, the answer your mother would have made might as easily have been "no" as it might have been "yes." Had she been a woman progressive and fearless and a little in advance of her time she would certainly have said "yes." Had she, on the contrary, belonged to the large conservative class who hesitate to take a step upon an untried path, she would have said "no."

I recall among my pleasant yesterdays one in which a group of charming friends were seated in a Southern home discussing the then newly organized Sorosis Club of New York. The fact that Alice Cary, sweetest and most feminine of poets, was one of the founders gave them pause, but they almost unanimously shook their heads, declaring that home was woman's sphere, and clubs were hostile to home and its interests, were directly or indirectly menaces to home happiness and had, besides, an air of dissipation intolerable to the lovely old-fashioned woman. Several gentlemen, we never said men in those days, dropped in for a cup of tea and lingered to escort their wives safely back to the domestic hearth.

While we chatted merrily, one of these good husbands, courtly of manner and decisive of speech, as well he might be, his official rank being that of judge on the bench, turned to me and said with emphasis, "I should lose the last vestige of esteem for any woman who should neglect her home duties to join a woman's club. The mention of such a thing is preposterous." The judge, by the way, lived long enough to change his attitude, to sit as a guest with other men of distinction—clergymen, authors and statesmen—at a brilliant anniversary function where a woman's club celebrated one of its birthdays and where he had the honor of making a happy after-dinner speech. Times change and we with them.

This little reminiscence affords me an opportunity to say that it is peculiarly a woman's privilege to change her mind. I have known women who were proud of stating that when they had said a thing, or taken a stand, no power on earth could modify their determination. This is absurdity in the superlative. Right is right, undoubtedly. There are certain essential things, but there are many which are non-essential. Nearly all the fuss in this world of ours, nearly all the little trials that creep into our days and leave a sting, are the product of clinging too closely to non-essentials.

For example, you and I may thoroughly disagree as to the propriety of turning the whole house upside down at once in the radical hour of the spring cleaning, to which an allusion has already been made. You may hold one opinion, and I another, yet we may remain the best of friends. The subject of spring cleaning so far as truth and honor are concerned is a non-essential and is no one's business but that of the housekeeper herself. If, on the other hand, we are talking about patriotism or education or temperance or clean politics or anything that deals with the inner life and its outer expression, then we are touching on an essential and here we must be of one mind if we are of the stuff which our country needs in its wives, mothers, sisters and daughters.

### Topics to be Treated

I am not sure that every woman who reads FARM AND FIRESIDE in the leisure of an afternoon, when the housework is finished and the cat is purring on the hearth, when the clock ticks on the mantel and the children have not yet come in from school, thoroughly approves of the woman's club. Married or single, women are intimately and deeply interested in home life. Homes cannot exist without woman's presence, woman's cheer and woman's common sense.

Housekeeping is one department of home interests, a wide and important one, but not the only one which enlists woman's heart, hand and brain. Child-training is another. We may begin with the babe in the cradle. Shall he be brought up by rule, according to the excellent modern system which keeps babies sweet, clean and wholesome and insures their mothers' nightly sleep, or shall he be permitted to be monarch of all he surveys, because he has no language but a cry? There are mothers and mothers. Some adhere to the wisdom of the past. Some prefer the science of the present. To home interests belongs the entire round of the clock, so far as the training of the rising generation is involved, from the time when they learn to talk, find out that they have wills and tempers, change rudimentary tendencies to habits, and gradually grow up into young men and women.

In the realm of home interests must be included home sanitation, a well-appointed table, hospitality, amusements, neighborly contact and home economies. In effect a Home Interests' Club may be very much like a bag into which one thrusts a hand to draw out a surprise package. Courtship, marriage, permanence of the family, home reading, the management of hired help when it can be obtained and the independence of doing without it when no help is in sight, these and kindred themes may properly fall within the scope of a large informal and thoroughly friendly Home Interests' Club.

Will you join me in making such a club successful? Our plan will be to meet once a month. It would be a trifle monotonous to meet always in the same place, always to follow the same program and to offer the same refreshment.

The women who are to join this good club will find it agreeable now and then to borrow the minister's study, occasionally to assemble in the church parlor, sometimes to accept an invitation from a friend on an outlying farm and again to meet in a village home. Our plan as to the place and background admits of as much variety as the shifting of a kaleidoscope. Whether you approve of clubs in general, I know you'll approve of this one.

If you will kindly send me your full name and address as soon as you can after reading this initial talk, I will enter you on my list of advisers. There is not a woman from the grandmother to the girl graduate who has not at times an overwhelming desire to declare her opinions.

When you write a letter for the reading of the club and for subsequent discussion, condense what you have to say by omitting long introductions and diffuse conclusions. Come straight to the point and never mind being abrupt. Write on one side only of the paper and address me in care of FARM AND FIRESIDE. If your letter is to be treated in confidence, inclose a stamped and self-addressed envelope, and you will receive a personal reply. The key-note of this Home Interests Club will be Good Cheer. Its atmosphere will be friendly, and we shall make room for plenty of good-humored fun.


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| Sweet Bunch Daisies | To End Of World With You |
| I Love It | I'm Looking for a Dear Old Lady |
| Winter | Any Little Girl that's Nice Girl |
| Kiss Me My Honey | By Light of Silvery Moon |
| Star of the East | I've Got Rings on My Fingers |
| Senora, "A Gem" | I'd Rather Say Hello |
| Stop, Stop, Stop | Dublin Rag "Madam Sherry" |
| Dreaming | Silver Threads Among the Gold |
| Think It Over Mary | Mesmerizing Mendels'n Tune |
| Daisies Won't Tell | Put On Your Old Grey Bonnet |
| Yip-I-Addy-I-Aye | When Autumn leaves are falling |
| Some Of These Days | Meet Me Tonight in Dreamland |
| Cubanola Glide | My Love is Greater than World |
| That Italian Rag | Where River Shannon Flows |
| Garden of Dreams | Play That Barber Shop Chord |

INSTRUMENTAL—Music for Piano or Organ

| | |
|---|---|
| Meditation by Morrison | Star of Sea Reverie |
| Kiss of Spring Waltz | Loveland Waltz |
| Silver Bell, Two Step | Moon Winks, Three Step |
| Rainbow, Two Step | Maple Leaf, Rag |
| Dill Pickles Rag | Beautiful Star of Heaven |
| Turkey in the Straw | Ben Hur Chariot Race |
| Ragtime-A-Tag-Rag | Wedding of Winds Waltz |
| Drifting Leaves, Reverie | College Life, Two Step |
| Burning of Rome, March | Apple Blossom, Tone Poem |
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# An Easter Sermon

By

The Reverend

Charles F. Weeden

Harvard Church

Boston, Mass.

IMMORTALITY was once in the dark. Some shadowy ideas about it have always been found with our race. The glimmer of the savage's ghost-world was so constant and world-wide that it indicated a real life to come. Said Professor Fiske, "While the savage made misstatements of the unseen world his attitude toward death was wholly different from all other animals and therefore distinctly human." Down to a certain period in man's history the hereafter continued weird and vague like a great city or landscape seen from a height and hidden in the dusk of early morning.

If a man die, shall he live again? The patriarch voiced a big question and a universal instinct. Naturally we look for some proof. What is the evidence? The idea of immortality is not new. Cicero thought that a future existence took deepest root and was most discoverable in the greatest and most exalted souls. The Angles and the Saxons thought that spirits went to Wallhalla, a land for war and hunting after death. The Egyptian placed seed in the coffin for the spirit to feed upon. Our American Indian thought of his "Happy Hunting-Ground." These gropings suggest that the idea of immortality was inborn with humanity, but in the dark.

### Reason Fairly Asks

Will the Creator disappoint man's intuition and desire for a future life? It is springtime and the birds are with us again. How did they come? God gave them instinct and satisfied that instinct. Will He deny the hope of a bright summerland for His highest creation?

Farmers are sowing the fields, their wives are planting flowers to adorn the garden. Let us follow this suggestion:

O little bulb, uncouth,
Ragged and rusty brown,
Have you some dew of youth?
Have you a crimson gown?
Plant me and see
What I shall be—
God's fine surprise
Before your eyes!

We may follow the analogy in the history of the worm which your child will pick up and bring to you:

O fuzzy ugliness,
Poor, helpless, crawling worm.
Can any loveliness
Be in that sluggish form?
Hide me and see
What I shall be—
God's bright surprise
Before your eyes!

It is unthinkable, impossible that a wise and beneficent God will leave neglected in the earth the soul of man, made in His own image.

O body wearing out,
A crumbling house of clay!
O agony of doubt
And darkness and dismay!
Trust God and see
What I shall be—
God's best surprise
Before your eyes!

Although the beauty of the flower and the wonder of the butterfly is encouraging, yet it is not proof. Has any man ever come back from the grave? That is what we want to know. Sufficient evidence is found only in religion. Said James Russell Lowell, "The worst kind of religion is no religion at all." He was speaking in England to men who were enjoying the advantages of a Christian civilization and who were ready "to kick down the ladder by which they have climbed up and persuade men to live without God and leave them to die without hope." How did we get the blessings of to-day? By Pagan darkness or philosophy? The Jews kept the oracles of God and so had a better idea of immortality than any other nation. They were in the twilight. The Bible is the "highest authority on all matters that pertain to life, death, eternity and God." Here is the great searchlight that flashes its rays far into the future: "One half the human race dies before it reaches the age of twelve years." The soul's genius upon earth is incomplete. Death is not so terrible for the savage, but to a highly sensitive, educated, cultured people it is terrible—unless there is hope. The New Testament tells of a Person who cried, "If any man thirst, let him come unto Me and drink." We thirst for knowledge of our immortality and frankly we come to Christ. His life, character, crucifixion are written in the most faithful and best established records of any book in the world. That Jesus Christ rose from the dead is rock-ribbed history.

Otherwise the whole fabric of Christianity falls as a delusion. By the fruits of the Christian religion do you think it has been a fraud? Mr. Lowell said further, "We are not aware how much we are sustained by an enormous mass all about us of religious feeling and convictions."

Confidence in life hereafter depends upon our personal knowledge of Christ. Many people to-day do not get the assurance of the future they would like to have. Some have nothing, we fear, but a shallow sentiment. It is all vague and when the dark shadow falls they are in despair, as Cicero was over his dead Tulia. We need personal faith. How does immortality come to light and knowledge? Paul answers,

### Through the Gospel

The kingdom of the future is within you, what you make yourself to be through the Gospel. What is the Gospel? A new life and effort with Jesus Christ. The old life does not grip immortality, for the old life is in the dark. Paul found this "good news" on the road to Damascus. Luther found it climbing Pilate's stairway on his knees in Rome. Wesley found it at forty years of age when he heard a Moravian speak of the love of God, and he said, "I believed that God did for Christ's sake forgive my sins, even mine." That was the new birth. Stanley announced himself the biggest atheist in London. On a mere business errand he went to report Livingstone in Africa. At first he said, "Is he crazy?" Then something of Livingstone's spirit crept into the heart of Stanley—that something was Christ—a new life. Not long ago this biggest atheist of London died and he comforted his broken-hearted wife, saying, "Do not weep; we shall meet again." It was immortality coming to light through the Gospel.

The intelligent readers of FARM AND FIRESIDE do not want guesswork, but to have a self-possessed power of a personal resurrection. Shall we live after death? Surely, unless the greatest scholars, the noblest statesmen, the deepest thinkers, the keenest business men of the ages are dupes—unless God Himself is false and utterly fails us.

One more incident. It was recently announced that Owen Kildare was dead. Have you read his life? He was reared in the blackest slum of Bowery life in New York. He spoke of himself as a leering knave. "I stood on the pinnacle of wickedness, had grinned and sneered at decency." God sent His love in the person of a frail school-teacher, who was a Christian, a little Christ. She said—this small school-marm to a big prize-fighter, "I am sorry for you. Do try and be a man, a man who has more than strength and muscle, and—and—do not be offended at my solicitude—pray—pray often." As she drew away she whispered, "I will pray for you to-night." Pray! "I can imagine," Kildare said, "the sneer that settled on my face. Before I reached my teens I was past-master of the art of profanity and my skill in cursing increased as I grew older. The name God had no meaning to me and slipped glibly from my lips at the slightest provocation. Pray? Why, it was ridiculous, but was it so very ridiculous?" Then the arch enemy began a fierce battle with the man, but what he called "the newer voice" prevailed and he went to his attic room to pray, alone, with his dog and his God. His prayer was natural—a heart-to-heart talk with his Father. If there was a better life, he was willing to try it. There was Kildare's hope. It was a miracle, he said, the new life for the man who at thirty years of age declared that he couldn't call one day in his life well spent. Gradually, "I began to see with the eyes of my soul," and from a depraved Bowery tough he became a man, who, when death snatched away his best earthly friend, his angel, his bride, his "Mamie Rose," knelt and prayed, "Thy will be done." It was the dawn of immortality in a man's soul. Friends, every reader of these lines yearns for the assurance of the homeland. You know this. Gain the richest farm, the biggest ranch in the world and at the last the

### Pearl of Great Price

will be your immortality. Some are surer than others of the heavenly meeting. Surer only because they obey and serve the Master day after day. I beg you to try it. I know you will find the light. A potato may sprout in your cellar—in the dark—but it will never gain fullness and fruition until you plant it out in the sunshine. Your hope of eternal life will be dim and dull until you live day by day in the sunlight of Christ's presence. Recently called to the bedside of a beloved mother, I shall always remember her last gesture, the uplifted finger pointing heavenward. It was not the belief of a moment, but the fruit of a life of faith and prayer and service.

Are you walking with the risen Christ? Are you working and serving with His disciples? That is the way immortality grows upon a man. Unless you have the King of Life treasured in your heart and rooted in your soul you will forget these Easter days with the beautiful harmonies of triumphant song. These pure floral emblems of what you may be will fade into a vague dream. This is the message I bring you at this Easter-tide. Immortality is brought to light through the Gospel. The kingdom of ageless life must be within your own soul. Christ formed in you the hope of glory. Then, because He lives, you shall live forever.


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# Sensible New Spring Clothes

## Designs by Miss Gould

STRIPES are extremely the vogue, especially in the voiles, tissues and the many lovely tub fabrics. These latter materials, though inexpensive, have borrowed much charm both in design and coloring from the more expensive veilings.

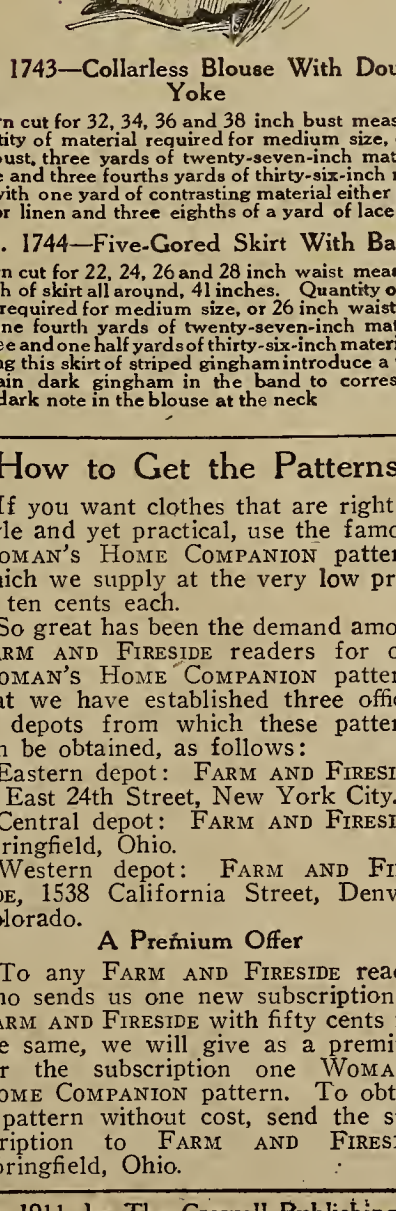
The organdies quite outrival in their beauty and softness some of the flowered silks. They come in pale violet, for instance, with a border of heliotrope just a tint or two darker. Then there are others which have a small flower design such as a white organdie scattered with pink rosebuds and having a deep border of full-blown roses and green leaves.

The cotton voiles come in many varied patterns. Some are flowered with an alternating stripe of net. Blue roses and even green roses are quite as often seen as those in the natural shades. A silken luster is a special feature of the best of the madras and cotton goods this summer.

No. 1249—Tucked Wrapper With Semi-Fitted Back

Pattern cut for 32, 34, 36, 38 and 40 inch bust measures. Material required for 36 inch bust, ten and one half yards of twenty-seven-inch material, or seven and one half yards of thirty-six-inch material. Dotted or striped gingham is good material for this wrapper

THOUGH very simple in style the shirt-waist suit here illustrated is a smart dress for the young girl. The waist is made on plain shirt-waist lines and the skirt is a five-gored model, which, though it is not cut in the extreme scant fashion, shows the modish straight lines. Such a dress may be made of a number of different materials. One of the new serges, very light in weight and showing a silken stripe, would be a good material to select for early spring wear. The collar, cuffs and belt could be of black silk and the buttons black bone ones. If a wash dress is needed, this model would be very stylish made of plaid gingham trimmed with plain colored gingham or white linen.



No. 1743—Collarless Blouse With Double Yoke

Pattern cut for 32, 34, 36 and 38 inch bust measures. Quantity of material required for medium size, or 36 inch bust, three yards of twenty-seven-inch material, or one and three fourths yards of thirty-six-inch material, with one yard of contrasting material either gingham or linen and three eighths of a yard of lace

No. 1744—Five-Gored Skirt With Band

Pattern cut for 22, 24, 26 and 28 inch waist measures. Length of skirt all around, 41 inches. Quantity of material required for medium size, or 26 inch waist, four and one fourth yards of twenty-seven-inch material, or three and one half yards of thirty-six-inch material. In making this skirt of striped gingham introduce a touch of plain dark gingham in the band to correspond with dark note in the blouse at the neck

No. 1759—Child's One-Piece Dress

Pattern cut for 1, 2, 4 and 6 year sizes. Quantity of material required for medium size, or 4 years, three yards of twenty-seven-inch material, or two yards of thirty-six-inch material, with one fourth of a yard of contrasting material. This pattern can be used for a number of dresses which by varying the trimming would look quite different

SILLY mothers are very much in the minority these days. Sensible mothers who believe in plenty of fresh air and plain frocks for their children are the mothers who prevail. Now, it is just this way with the average young mother of these twentieth century days, when it comes to making or planning new clothes for her children, she takes many things into consideration before she starts the work. Though she believes in plain frocks, she does not want them so sensible that they are hideous looking. She wants her little girl or boy to have trim and good-looking clothes, but she wants them to be clothes that will launder well and that will stand not only many washings, but much hard wear.

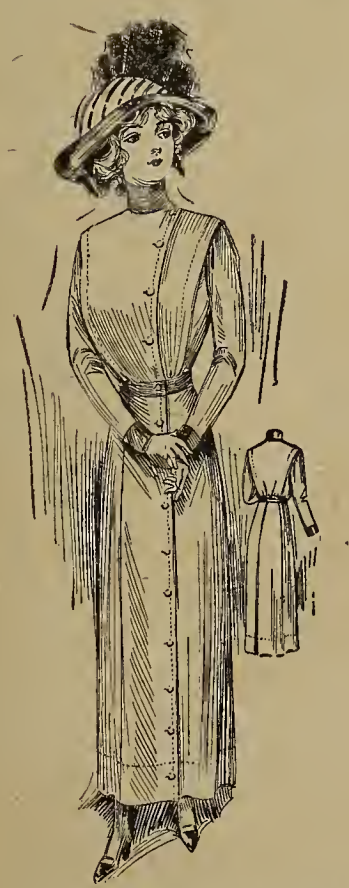
It is just such a dress as this that is illustrated on this page in pattern No. 1759. This little one-piece dress slips on over the head and buttons at the side. It is the easiest possible sort of a little garment to launder, for it may be opened out flat when ready to wash and iron.

No. 1739—Blouse With Sailor Collar

Pattern cut for 32, 34, 36, 38 and 40 inch bust measures. Quantity of material required for medium size, or 36 inch bust, two and one fourth yards of twenty-seven-inch material, or one and seven eighths yards of thirty-six-inch material, with seven eighths of a yard of contrasting material for collar and cuffs

No. 1740—Two-Piece Skirt

Pattern cut for 22, 24, 26, 28 and 30 inch waist measures. Length of skirt all around, 41 inches. Quantity of material for medium size, or 26 inch waist, four yards of twenty-seven-inch material, or three yards of thirty-six-inch material. There will be no laundry problems for the woman who counts among her summer dress skirts this stylish model



No. 1713—Misses' Double-Breasted Shirt-Waist

Pattern cut for 12, 14 and 16 year sizes. Quantity of material required for 14 years, two and one fourth yards of twenty-four-inch material, or one and seven eighths yards of thirty-six-inch material, with one half yard of contrasting material for the trimming. This pattern may be used for a separate waist if desired

No. 1714—Misses' Gored Skirt Buttoned at Side

Pattern cut for 12, 14 and 16 year sizes. Quantity of material required for medium or 14 year old size, five yards of twenty-four-inch material, or two and five eighths yards of thirty-six-inch material

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Western depot: FARM AND FIRESIDE, 1538 California Street, Denver, Colorado.

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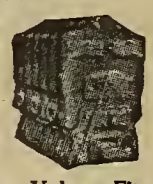

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# This Pony a Gift

## To Be Given Away To Some Boy or Girl

## Read How to Win "Beauty"

Good news for FARM AND FIRESIDE boys and girls! Don't you want to get "Beauty?" Well, you can win him and his handsome cart and harness without spending a penny. "Beauty" is as gentle and kind as a kitten and as sound as a dollar, and my, how he can go! He is just forty inches high and weighs 250 pounds and is one of the finest Shetland ponies ever raised in America. "Beauty" will be given away in just a little while, on June 30th, by FARM AND FIRESIDE, the oldest and best farm paper published. All you have to do to win "Beauty," or one of the other elegant prizes, is to ask a few friends to subscribe to FARM AND FIRESIDE, the national farm paper. Besides "Beauty," hundreds of handsome prizes will be given away to boys and girls. Altogether we offer

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### Pony Book Free

You can get the beautiful Pony Book **free** by just sending your name to the Pony Man. The Pony Book contains the pictures of dozens of handsome ponies, which have been won by FARM AND FIRESIDE boys and girls. It also contains the pictures of the boys and girls themselves. It is the most interesting book you have ever read. It is written by these boys and girls themselves and tells just how they won the ponies.

### Send Your Name To-day

Write your name and address on the Coupon below (or a postal card) and send it to the Pony Man. I will tell you by return mail how to win "Beauty." I will also send you a lot of photographic pictures of "Beauty" and the other ponies, together with everything necessary to start right in and win. Also I will send you the beautiful Pony Book and a free copy of the Easter number of FARM AND FIRESIDE. All these things won't cost you a penny and won't commit you to do a single thing.

If you want to make sure of a prize the very first thing, don't wait to hear from me, but get 10 of your friends each to give you 25 cents for an eight-month subscription to FARM AND FIRESIDE. Then you will be a prize winner and enrolled contestant sure. Keep five cents for your cash commission. Hurry up! Start to-day.

**A special additional prize of an elegant set of Fortune-Telling Post-Cards if you get 10 points before May 1st. Hurry up! Send in your name to-day!**

Cut Out This Coupon

R

Dear Pony Man:—
Please tell me by return mail how to win "Beauty." Also send me, free, the pictures of "Beauty" and the other ponies, and the Pony Book. I am very anxious to get "Beauty," so save a place for me in the contest. I will send my ten subscriptions as soon as possible.

Name.....

Town.....

R. R.....State.....

**The Pony Man**
**Farm and Fireside**
**Springfield, Ohio**


# The Room of Many Shadows

[CONTINUED FROM PAGE 22]

Had I loved no one else, I should have been happy still, and not been obliged to face strangers over her body and bare the secrets of my heart to preserve my good name. There is a man, he seems a thousand miles away from me now, so much have I lived since yesterday. He—he lived in the house where I did—was one of the family—always at table—always before my eyes. He fancied me. I—I might have fancied him had he been a better man. But he was far from being of the sort my mother approved, and when he urged his suit too far, I grew frightened and finally ran away. It was not so much that I could not trust him," she bravely added, "but that I could not trust myself. He had an unfortunate influence over me, which I hated while I half yielded to it."

"You ran away. When was this?"

"Yesterday afternoon at about six. He had vowed that he would see me again before the evening was over, and I took that way to prevent such a meeting. I did not dream that sorrows awaited me in this quiet tavern, and perplexities so much greater than any which could have followed a meeting with him that I feel my reason fail when I contemplate them."

"Go on," urged the coroner. "Let us hear what happened after you left your home in Farnhurst."

"I went to the nearest telegraph office, and sent a message to my mother. I told her I was coming home, and for her to meet me on the road near this tavern. Then I had supper and I hurried away so as to reach Four Oaks before dark. If my mother had got the telegram at once, which I calculated on her doing, as she lived next door to the telegraph office, she would be very near this place on my arrival here. So I began to look for her as soon as I entered the woods. But I did not see her. I came as far as the tavern door, and still I did not see her. But farther on, just where the road turns to cross the railroad track, I spied her coming. She was glad to see me, but asked a good many questions which I had some difficulty in answering. She saw this, and held me to the matter till I had satisfied her. When this was done it was late and cold, and we decided to come to the tavern for the night. *And we came!* Nothing shall ever make me deny so positive a fact. *We came,* and this man received us."

She then rose and now stood upright, with her finger pointing straight at Stetson. Had he cringed or let his eyes waver from hers by so much as a hair's breadth, her accusation would have stood and her cause been won. But not a flicker disturbed the steady patience of his look, and Rodney, who had made no effort to hide his anxiety to believe her story, showed his disappointment with equal frankness as he asked:

"Who else was in the office? Surely Mr. Stetson was not there alone?"

She reseated herself before answering. Rodney could see the effort she made to recall that simple scene.

"There was a man," she said, "I am sure there was a man somewhere at the other end of the office. But I paid no attention to him. I was bargaining for two rooms and registering my name and that of my mother."

"Two rooms; why two?"

"Gentlemen, I was tired. I knew that if we occupied the same room or even adjoining ones nothing could keep us from a night of useless and depressing conversation. I did not feel equal to it, so I asked for two rooms a short distance apart."

An explanation which could at least be accepted. Mr. Rodney felt an increase of courage and scarcely winced as his colder-blooded companion continued this unofficial examination by asking:

"Where were you standing when making these arrangements with Mr. Stetson?"

"Right before the desk."

"And your mother?"

"She was at my left and a little behind me. She was a shy woman. I usually took the lead when we were together."

"Was she veiled?" the coroner continued quietly.

"I think so. She had been crying—" she paused.

"But don't you know?"

"My impression is that her veil was down when we came into the room. I know that it was lifted as we went up-stairs. I remember feeling glad that the lamps gave so poor a light, she looked so distressed."

"Physically, do you mean, or mentally?"

Mr. Rodney asked this question. It seemed to rouse some new train of thought in the girl's mind. For a minute she looked intently at the speaker, then she replied in a disturbed tone:

"Both. I wonder—" Here her thought wavered and she ceased.

"Go on," ordered the coroner impatiently. "Tell your story. It contradicts that of the landlord in almost every point, but we've promised to hear it out, and we will."

Rousing, she hastened to obey him.

"Mr. Stetson told the truth when he said that he asked me if I would have supper, also when he repeated what I said about a gentleman, but not when he declared that I wished to be told if my mother should come and ask for me. My mother was at my side all the time we stood there talking, and I did not need to make any requests concerning her. When we went to our rooms a woman accompanied us. He says she is his wife. I should like to see that woman."

"I am right here, miss," spoke up a voice from a murky, obscure corner that no one had thought of looking in till now.

Miss Williams at once rose, waiting for the woman to come forward. This she did with a quick, natural step which insensibly prepared the mind for the brisk, assertive woman who now presented herself. Mr. Rodney at sight of her open, not unpleasing face, understood for the first time the decided attitude of the coroner. If this woman corroborated her husband's account, the poor young girl, with her incongruous beauty and emotional temperament, would not have much show. He looked to see her quailing now. But instead of that she stood firm.

"Let her tell you what took place up-stairs," she cried. "She showed us the rooms and carried water afterward to the one my mother occupied."

"I am sorry to contradict the young lady," came in even tones from the unembarrassed, motherly-looking woman thus appealed to. "She thinks that her mother was with her and that I conducted this mother to another room after showing her to her own. But the facts are these: She came alone and went to her room unattended by anyone but myself. And what is more, she seemed entirely composed at the time, and I never thought of suspecting the least thing wrong. Yet her mother lay all that time in the wood—"

"Silence!"

This word was shot at her by Miss Williams, who had risen to her full height and now fairly flamed upon them all in her passionate indignation. "I will not listen to such words till I have finished all I have to say and put these liars to the blush. My mother *was* with me, and this woman witnessed our good-night embrace, and then piloted my mother to her own room. I watched them going. They went down the hall to the left and around a certain corner. I stood looking after them till they turned this corner, then I closed my door and began to take off my hat. But I wasn't quite satisfied with the good-night which had passed between my poor mother and myself, and presently I opened my door and ran down the hall and around the corner on a chance of finding her room. I don't remember very well how that hall looked. I passed several doors seemingly shut for the night, and should soon have turned back, confused, if at that moment I had not spied the landlady's figure, your figure, madam, coming out of one room on your way to another. You were carrying a pitcher, and I made haste and ran after you and reached the door just before you turned to shut it. Can you deny that, or that you stepped aside while I ran in and gave my mother another hug? Why, gentlemen, you, one of you at least, have heard me describe the very room in which I saw my mother. It is imprinted on my mind. I didn't know at the time that I took especial notice of it, but hardly a detail escaped me. The paper on the wall—"

"We have been looking through the rooms," interpolated the coroner. "We do not find any papered with the muddy pink you talk about."

She stared, drew back from them all, and sank into a chair. "You do not find— But you have not been shown them all."

"I think so."

"You have not. There *is* such a room. I could not have dreamed it."

Silence met this suggestion.

Throwing up her hands she cried, "It's a conspiracy. The whole thing is a conspiracy. If my mother had had money on her or had worn valuable jewelry, I should believe her to have been a victim of this lying man and woman. As it is, I don't trust them. They say that my poor mother was found lying dead in the wood. That may be true for I saw men bringing her in. But if so, what warrant have we that she was not lured there, slaughtered and made to seem the victim of accident by this unscrupulous man and woman? Such things have been done, but for a daughter to fabricate such a plot as they impute to me is past belief, out of nature and impossible."

Then she begged to be allowed to search the house for the room she so well remembered. "When I show you that," she cried, with ringing assurance, "you will believe the rest of my story."

"Shall I take the young lady up myself?" asked Mr. Stetson. "Or will it be enough if my wife accompanies her?"

"We will all accompany her," said the coroner.

"Very good," came in hearty acquiescence.

"It's the only way to quiet her," he whispered in Mr. Rodney's ear.

The latter turned on him suddenly.

"None of your insinuations," he cried. "She's as far from insane as I am myself. We shall find the room."

"You, too," fell softly from the other's lips as he stepped back into the coroner's wake. Mr. Rodney gave his arm to Miss Williams, and the landlady brought up the rear.

"Up-stairs," ordered the trembling girl. "We will go first to the room I occupied."

As they reached the door, she motioned them all back, and started away from them down the hall. Quickly they followed. "It was around a corner," she muttered. "That is all I remember. But we'll visit every room."

"We have already," objected the coroner, but meeting Mr. Rodney's warning look, he desisted from further interference.

"I remember its appearance perfectly," she persisted, as door after door was thrown back and as quickly shut again at a shake of her head. "Isn't there another hall?"

"Yes, there is another hall," acquiesced the landlord, leading the way into the passage communicating with the extension.

"Oh!" she murmured, as she noted the increased interest in both the coroner and his companion; "we shall find it here."

"Do you recognize the hall?" asked the coroner as they stepped through a narrow opening into the old part.

"No, but I shall recognize the room."

"Wait!" It was Rodney who called her back as she was starting forward. "I should like you to repeat just how much furniture this room contained and where it stood."

She stopped, startled, and then said:

"It was awfully bare; a bed was on the left—"

[CONTINUED ON PAGE 30]

# Letters From a Country Sister

DEAR MARTHA:—

I sometimes think that housekeepers deserve very little sympathy in their work, arduous and strength-sapping as it is, because many times it is their own fault that their working appliances are so meager. I dont know why a housekeeper should carry on her work from day to day with poor tools or worse still, in many cases no tools. Every sane person admits that the home-maker's work is worth while. One occasionally meets a dissatisfied woman, or a very foolish man who has the idea that the woman, earning a paltry sum of money in the business or professional world, is worthy of greater consideration than the women who make our homes, rear our children and keep our men decent.

But such people are in the minority and are generally the weary, disheartened women who have been struggling along without encouragement, without even the assistance of a really good broom and sound washboard. Goodness! It shakes my good temper to its very roots to see worn-out domestic appliances in everyday use. An old clothes-wringer that I continued to use season after season brought me to this state of irritation. The rubber rollers were cracked and worn until it was practically useless to put wet articles through it; the screws wouldn't hold and one spring was broken. Still I kept on trying to use it Monday after Monday, why? I really don't know—just habit I suppose. Then the washboard, with the jagged crack in the zinc on which you cut your finger every other week! Why in the name of common sense has it been kept in use so long? Simply to wear out patience and make work harder!

All these things began to come to me gradually after I had the water brought into the kitchen. What a saving of steps and strength that proved and what a simple task it was to accomplish. I wonder if you and all other farm women know what a small matter it is to get rid of carrying water into the house? You may not be able to afford a water system that will force the water into every room in the house, but you can certainly have it in the kitchen. It costs practically nothing to have the water from the cistern, beside the house, carried by a three-inch pipe under the floor to connect with a small pump fastened to the kitchen sink. To have the work complete there should be a waste-pipe from the sink to the house drain. And there you have water at your hand and are rid of one of the unnecessary and irksome parts of housework on a farm. I hope it will not be long until you can have an air-pressure water system in your home, but until that time arrives I know you will have found this simple contrivance an untold comfort.

Then don't neglect to get a slop-hopper at once, if you haven't one already. I got mine without even asking Hiram if I might, because it costs only one dollar and twenty-five cents. It is an iron box about eighteen inches square on top and gradually sloping at the sides to fit a six-inch pipe which connects with the house drain. The bottom of the hopper is screened with coarse, strong wire netting which will prevent anything which might clog it passing into the pipe. The hopper should be located near the back door and should have a close-fitting cover and, more than that, it should be washed out frequently or it will afford a breeding-place for flies.

I said I bought this hopper without even speaking to Hiram about it. And why not? Its cost was almost nothing, so he couldn't object on that score; besides, isn't a farmer's wife a partner in the farmer's business? I should think so indeed, a very important partner, too. Do you know I have decided that the average farmer would not continue to farm very long if it were not for the home and family that belong to the farm, and his wife is, or ought to be, the central figure in the home? So don't you see how important is our position?

When I discovered how much time I was saving by having the water in the kitchen I began looking around that part of the house to see what other needed changes I could make. As I said, I began by discarding the old wringer and washboard. Less than five dollars replaced both with first-class new ones. But when I bought the washboard I mentally resolved that before many months had passed it would be relegated to the "has beens" and I would find an easier way to do the washing. Then several worn-out cooking-utensils were put aside for the old rag and bottle man. How women do cling to old saucepans and kettles! I found three or four in my collection that had scorched and burned enough food to more than pay for new ones if I had been square with my family and had served only properly cooked meals all the time.

Really the best grade of enamelware costs very little compared with the comfort of using them and with ordinary care they will last a very long time. For the sake of good health and wholesome cooking it is very unwise to use enamel or granite saucepans after they have begun to chip.

Before I had finished renovating my kitchen I bought a new range—the old one should have been discarded six years before—but a range seemed such an expensive article to me in the face of that mortgage. But it came to me that in spite of the mortgage Hiram had twice exchanged both his corn-planter and binder for new ones of more up-to-date style and why shouldn't I have a good cook-stove with an oven that didn't burn on the bottom or top? Cooking in our family seemed almost as necessary as corn-planting.

When I brought the matter to Hiram's attention he might have demurred if I hadn't had a few facts and figures to bolster up my request for a new range. When I compared the cost of stoves and corn-planters, showed how long each had been in service in our business and made an estimate of how much work had been obtained from each, Hiram had nothing to say. The next time he went to town he asked me to go with him and select my range. Oh, men are generally amenable to reason if you know how to handle them.

*Your Country Sister*

# Just for Fun

### The Proper Name

THE governor of Maine was at the school, and was telling the pupils what the people of the different states were called.

"Now," he said, "the people from Indiana are called 'Hoosiers,' the people from South Carolina 'Tar Heels,' the people from Michigan we know as "Michiganders.' Now what little boy or girl can tell me what the people of Maine are called?"

"I know," said a little girl. "Maniacs."—The People's Popular Monthly.

### Different Viewpoint

"YOU have such strange names for your towns over heah!" said a titled Englishman. "Weehawken, Hoboken, Poughkeepsie and ever so many others, don't you know?"

"I suppose they do seem strange to English ears," said the American. "Do you live in London all the time?"

"Oh, no," replied the Briton. "I spend part of my time at Chipping Norton, and then I've a place at Pokes-togg-on-the-Hike."—The Housekeeper.

### Pleased His Majesty

THE dark monarch from sunny Africa was being shown over an engineering plant in Salford by the manager, who, in explaining the working of certain machinery, unfortunately got his coat-tails caught in it, and in a moment was being whirled around at so many revolutions per minute. Luckily for the manager, his garments were unequal to the strain of more than a few revolutions, and he was hurled, disheveled and dazed, at the feet of the visitor.

That exalted personage roared with laughter and said something to his interpreter.

"Sah," said the functionary to the manager, "his majesty say he am berry pleased wid de trick, an' will you please do it again?"—The Housekeeper.

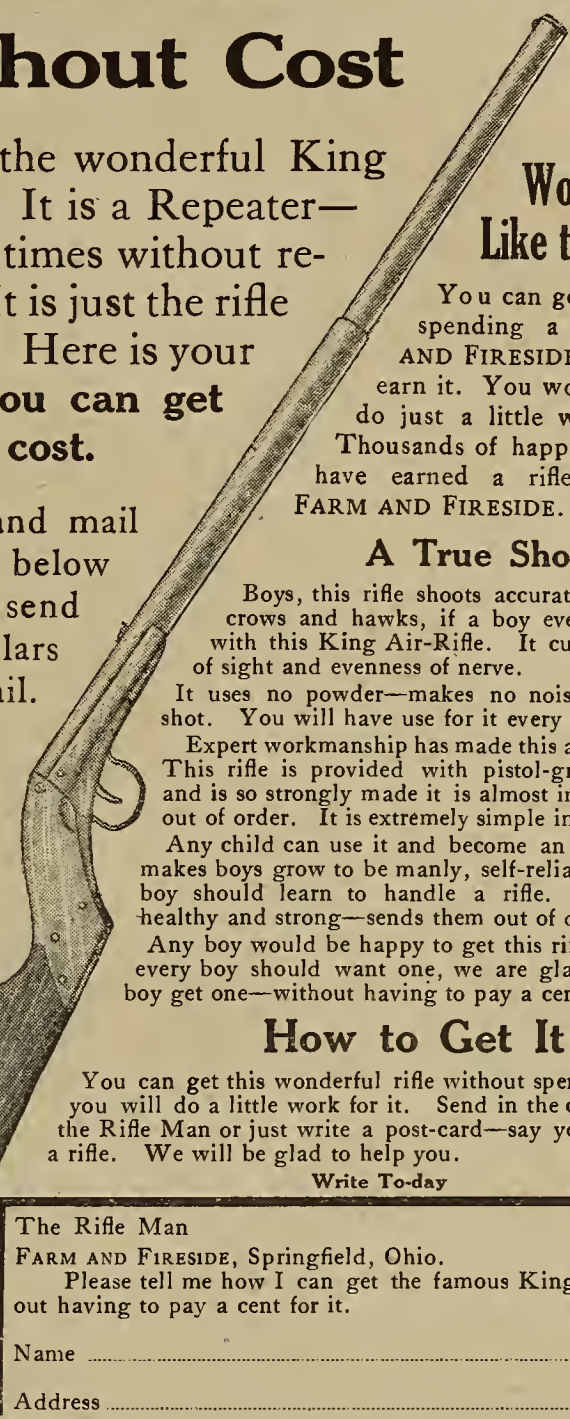

# THIS AIR-RIFLE
## Without Cost

For You

This is the wonderful King Air-Rifle. It is a Repeater—shoots 150 times without reloading. It is just the rifle for a Boy. Here is your chance—**you can get it without cost.**

Fill out and mail the coupon below and we will send full particulars by return mail.

**For Our Boys**



### Would You Like to Get One?

You can get one without spending a cent. FARM AND FIRESIDE will help you earn it. You would be glad to do just a little work to get it. Thousands of happy boys already have earned a rifle easily from FARM AND FIRESIDE.

### A True Shooter

Boys, this rifle shoots accurately. Look out, crows and hawks, if a boy ever gets after you with this King Air-Rifle. It cultivates trueness of sight and evenness of nerve.

It uses no powder—makes no noise—uses air and shot. You will have use for it every minute.

Expert workmanship has made this a wonderful gun. This rifle is provided with pistol-grip, true sights, and is so strongly made it is almost impossible to get out of order. It is extremely simple in construction.

Any child can use it and become an expert shot. It makes boys grow to be manly, self-reliant men. Every boy should learn to handle a rifle. It makes them healthy and strong—sends them out of doors.

Any boy would be happy to get this rifle. No wonder every boy should want one, we are glad to help every boy get one—without having to pay a cent for it.

### How to Get It

You can get this wonderful rifle without spending a penny if you will do a little work for it. Send in the coupon to-day to the Rifle Man or just write a post-card—say you want to earn a rifle. We will be glad to help you.

**Write To-day**

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Please tell me how I can get the famous King Air-Rifle without having to pay a cent for it.

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# Get a Watch and Fob
## Without Cost

**Boys:** **Here is a chance** to obtain a handsome and useful watch, and a fine leather fob with a gilt metal charm engraved with **your own initial letter** without cost. FARM AND FIRESIDE guarantees you satisfaction.

**DESCRIPTION:** This watch has a handsome nickel case, with open face. It is a stem-wind and a stem-set, just like other high-priced watches. It has a close-fitted snap back. It is only ⅜ inch in thickness. It is a perfect timekeeper, tested and regulated before leaving the factory. It is engraved front and back, and is a watch of which anyone would be proud.

**The Fob** is of handsome black leather with a polished buckle, like illustration, with a rich gilt charm engraved with **your own initial.**

**MOVEMENT:** Regular 16 size. Lantern pinion (smallest made). American lever escapement, polished spring. Weight, complete, with case, 3 ounces. Quick train, 240 beats to the minute. Short wind, runs 30 to 36 hours with one winding.

Every watch is fully guaranteed by the manufacturers and by FARMAND FIRESIDE.

The manufacturers will make all repairs for a year free, as explained on the guarantee.

### How to Get the Watch

You can get this dandy watch and fob very easily. Write a postal-card to the Watch Man. Tell him you want to get this watch and fob without spending one penny. He will be glad to help you get your watch. This is a chance you must not overlook.

Thousands of delighted boys have secured their watches this way with the help of the Watch Man. You can do it, too. Any boy that really wants one can easily get this fine watch. But how will the Watch Man know about you if you don't tell him?

**Write a Postal To-Day to THE WATCH MAN**

**FARM AND FIRESIDE, Springfield, Ohio**

# OUR YOUNG FOLKS' DEPARTMENT

Conducted by Cousin Sally

# Garden Notes by Our Boys and Girls

### How I Raised Vegetables

IN MY garden I raised radishes, beets, tomatoes, peas and lettuce. I planted the radishes in April, in sandy soil, and sowed them one half inch deep, in rows twelve to eighteen inches apart.

I planted the beets in April and sowed them a half inch deep, in rows about eighteen inches apart and packed the dirt firmly over the seed.

I sowed the tomatoes in February in the house in shallow boxes in rows, four to six inches apart, and a half inch deep. When the plants were about two inches high I transplanted them into shallow boxes four inches apart each way. In June I planted them in the ground, quite deep.

The peas I sowed in April, six inches deep in the ground and two feet apart in double rows. When they were about four or five inches high I bushed them.

The lettuce I planted in April. I sowed it in mellow ground about a half inch deep and fourteen inches apart.

RUBY LIDDLE, Age Nine,
Andes, New York.

### How I Raised Flowers

MY FLOWER-GARDEN is on the south end of the vegetable-garden. It is divided into two parts, one part for annuals and the other for perennials.

In the annual part I have sweet peas, poppies, asters, bachelor buttons, larkspur, sweet sultans, everlasting flowers, petunias, California poppies, phlox, nasturtiums, stocks and verbenas.

I plant my sweet peas as early as possible, usually the last of March or the first of April. I dig a trench four inches deep on two sides of my flower-garden and lay the seeds one and a half or two inches apart. I then cover them with two inches of soil and when they come up I push the rest of the soil around their roots. When they are six inches high I drive stakes into the ground, to which I fasten stout strings for their support. I keep them cultivated, and if the soil becomes dry, I water them. They commence to bloom the last of June or the first of July. I cut the blossoms every day and they bloom until the frost kills them.

The last of April or the first of May I plant my sweet sultans, everlastings and nasturtiums. I cut the everlastings when they just commence to open and hang them up to dry.

The poppies, bachelor buttons, larkspur, petunias, California poppies, phlox and verbenas come up by themselves from seed. I transplant the largest of all but the poppies, which I thin out.

I plant part of my asters in the house the first of March and part of them out of doors when I plant the rest.

In the perennial part I have a row of hollyhocks at the back. Next is a root of golden glow, a bed of gladioli, a clump of sweet-williams, two red peonies, three kinds of pinks, a lemon lily, a bunch of feverfew, a pink and several rose-bushes. In the front is a big bed of pansies and beside them is a small bed of forget-me-nots. Clear along the front of my garden for a border I have a row of dwarf morning-glories. I plant my gladioli the last of April, placing the bulbs two or three inches deep. I take them up in the fall and keep them in a dry place until spring.

To protect my perennials in the winter I cut evergreen branches and lay over the plants. It holds the snow well and lets in the air so that they will not mold as they do when covered with straw.

LORA FARRINGTON, Age Fourteen,
R. D. 1, Box 67, Kalispel, Montana.

### How I Raised Sweet Peas

I AM fifteen years old and go to school. Last spring I thought I would try raising sweet peas. I planted the seeds about the first of April. I got some nice rich soil from our wood-yard and dug a trench along our garden fence and put some of the dirt in the trench and then sowed the sweet peas in this dirt. Then I put some of the rich dirt on the top of them. They came up in about a week and a half. They are awfully nice and they grow very fast. When they began to vine I drove little stakes in the ground and tied some strings to the stakes and palings. They began to bloom about June. They were all colors; red, white, blue, yellow, purple, lavender, cream and some variegated. The weather was very dry, so every evening when the sun went down I watered them. I cut them nearly every day and that made them bloom much better, for if you do not cut the bloom, they will soon stop blooming, especially if the weather is dry.

Everybody that came along said they were the nicest sweet peas they had ever seen. Mother often sold my sweet peas in town for ten cents a bunch.

BESSIE D. TRUAX, Age Fifteen,
R. F. D. 1, Hanlin Station, Pennsylvania.

### How I Raised Strawberries

ONE day last spring I helped mother hoe strawberry-plants. In some places there were too many plants and we had to take out some. Mother intended to throw these away, but I asked her to let me have a strip across one side of the garden and I set them out there. I had enough to make two rows eighty feet long. I hoed these very carefully all through the summer. Whenever I found a plant beginning to bloom, I pinched the bloom off, because the first year all the plant's strength must be used in sending out new runners.

I hoed them the last time about the first of October.

The weather did not get very cold until late, so I did not cover them until the last of November. I covered them with plenty of oat-straw.

The next spring was rather late and cold, so I did not take the straw off until the fourteenth of April.

The plants bloomed the first week of May, and the second day of June I picked enough ripe berries for a shortcake.

I got from fourteen to sixteen quarts at every picking. I sold two quarts for twenty-five cents. I had nine pickings and sold in all one hundred and forty quarts. The money I received amounted to sixteen dollars and ninety cents. Don't you think this was doing well?

HAZEL SHIPMAN, Age Seventeen,
Ramsey, Illinois.

### How I Raised Watermelons

LAST year I had a small garden. About May 25th I planted watermelon-seed, and some radish-seed between them.

When the radishes were big enough to eat, I pulled them up and let the melons have the patch alone. After this I hoed them often to keep them free from weeds. We had a very bad dry spell out here last summer, but I took some stable manure and put it in an old pail with some water, and put this on the melons every evening. This not only kept the ground rich and moist, but kept the plants free from bugs, and in the fall I had nice large watermelons. I also raised some flowers. Mother gave me some bulbs, which she had received from FARM AND FIRESIDE in 1909. I planted these, and in the spring I had a nice double tulip and some other nice flowers. I love to work in the garden. I am going to have one this year.

WILLIE MENSING, Age Twelve,
R. R. 1, Box 63, Lowden, Iowa.

### How I Raised Popcorn and Cucumbers

I PLOWED and furrowed the ground with my hand plow, and planted the corn about the second of May. It came up fine and I plowed it out every week when it was dry enough, until it was too large. When it was ripe I cut it up and had six shocks. When I husked it there were five bushels. I sold the fodder to Uncle John Campbell and got seventy-five cents for it.

About my cucumbers: I plowed out a patch for cucumbers and made the hills, then I planted the seed. I put about a dozen in a hill and then thinned it out to about six to a hill.

I worked them out about four times. We are greatly enjoying the pickles this winter. I raised quite enough for our own use.

NORMAN RUSSELL, Age Thirteen,
R. F. D. 1, Middleport, Meigs County, Ohio.

## The Letter-Box

DEAR COUSIN SALLY:—

I am sorry that I have not been writing to you regularly, but I go to school every day, and at night I am busy studying my lessons and do not have time to write.

I have made every day at school since it started in September and my teacher has promised to give me a silver medal for coming. I am in the fifth grade.

I have been trying to get some of the girls in our school to join our club.

I would be glad to hear from any of the cousins.

Your cousin, DEVONA FLUHART,
R. F. D. 6, Mt. Airy, Maryland.

MY DEAR COUSIN SALLY:—

I have read your interesting letters in FARM AND FIRESIDE and think I would like to join the club, so inclose five cents for the club button.

I live in New Jersey. It is country all about, but I lived in New York and was born there. I have only been in the country about five years. I envy the members of the club that live out West, because it is my greatest ambition to go "out West." Of course, I know it's not like it used to be thirty years ago, but just to be out there would be all right for me. I used to own a pony, a real "Western mustang," but the pony is dead now and I am wild for another.

I wish the club all success and happiness.

Yours very sincerely,
LLEWELLA QUARRIE, Age Twelve,
R. F. D. 4, Somerville, New Jersey.

DEAR COUSIN SALLY:—

I am a country girl and am thirteen years old. I am in the sixth grade.

We have a school term of six months. It does not seem a very long time, although it is very stormy sometimes.

I like to read books, especially Louisa May Alcott's books, such as "Little Men," "Little Women," etc., and I am sure the other cousins have read them, too.

I would like to exchange post-cards with the cousins.

Your loving cousin, CLARA TUNSETH,
Mayville, North Dakota.

DEAR COUSIN SALLY:—

I received the club pin and was so glad to get it. It is very pretty.

I live in the country and my papa has a large farm and orchard. I have had trouble with my little pets. I had a rabbit and it died. I had a little dog, no larger than a small kitten, and it died. I also had a large kitten all black, and a white tip on its tail. I called it Tiptail, and it died. Now I have only one kitten.

In the summer I have a ride on the horse almost every evening. I gather eggs for mother, and it is such fun. The other day I found two new nests and one had six eggs in it and the other three. I am in the fourth grade in school. I would like to exchange cards with some of the cousins.

Your cousin, JENNIE LARSON, Age Ten,
Box 88, Pleasant Grove, Utah.

DEAR COUSIN SALLY:—

I have not written to you in such a long time that, really, I am ashamed to acknowledge it. But I am going to try to write oftener, now that I have more time.

I am thirteen years old. I live in the country and have many pets. I have two dogs, named Pat and Sport, a cat named Bill and, besides, I have thirty-one chickens that I make great pets of. My nicest pet is a rooster. He is so funny and clumsy. He has such large feet that he stumbles all over himself when he runs. I named him "Gawk." When I call, "Here, Gawk," he runs up to me looking for something to eat.

Just a word to tell you how I love your little stories. Your letters to us are just fine. They help me to remember our motto.

I would like to exchange post-cards with the cousins. I am making a collection of church postals and have about three hundred.

My love to all the members and to you, Cousin Sally.

Your cousin, BESSIE BANKS,
R. F. D. 9, Fairfield, Connecticut.

DEAR COUSIN SALLY:—

Your very nice letter, sending me the club button, at hand, and I am very pleased with both. I am glad I joined the club and I can assure you and all my cousins that I will be loyal to my club. I certainly would like to correspond with some of my older cousins from fifteen to seventeen years of age, in any part of the United States.

Your letter was very good in the February 10th issue.

Very sincerely, OTTO NABER,
R. F. D. 3, Parkton, Maryland.

DEAR COUSIN SALLY:—

I have not written in a long time because we have been moving from Alsen, New York, to Florida.

We like it here very much. The flowers are in bloom. I went out and picked some violets the other day. The trees are full of oranges and grape-fruit.

The lady where we board has a horse and she lets me ride it. She has two dogs and my dog does not like them.

Your cousin, ARLAND GRAY, Age Eight,
Orlando, Florida.

DEAR COUSIN SALLY:—

I am writing to thank you for the lovely paints. I am so glad you thought my poem worth a prize. It was the first one I ever wrote. But I shall try again.

Your little friend, RUTH BENJAMIN,
Peckville, Pennsylvania.

## Monthly Prize Contest

I WANT my girls and boys from eleven to seventeen years of age to write a story about the picture of the two boys shown on this page. Study the picture very carefully, think about it for a long time and see what your imagination can do. I can think of all sorts of stories about these two boys who are looking so intently in at the window. But I am not going to give you one idea, for I want your story to be absolutely original. I shall not even suggest a title. I am going to leave everything to you. So just give your imagination full play and see if you can't write an interesting story about these two boys. Do not write more than four hundred words. Write in ink on one side of the paper only, with your name, age and address in the upper right-hand corner. Remember that neatness, spelling and grammar will be considered as well as the idea of your story. So send me the very best work you can.

All stories must be indorsed by parent or guardian to show that your work is original, that you had no help with it in any way. The contest closes April 29th.

For the two best stories we will give to the girl a white satin purse painted with a charming water-color scene and having a wrist-chain, and to the boy a splendid penknife. For the two second best stories we will give prizes of post-card albums.

For the six next best stories in order of merit we will give prizes of colored crayons, books or water-color paints.

### Contest for Younger Readers

Little boys and girls under eleven years of age, I want you to color in crayon or water-color the picture of the two boys shown above. For the four best colored pictures we will give three prizes of bead necklaces to the girls, and three prizes of games to the boys.

All letters should be addressed to Cousin Sally, FARM AND FIRESIDE, 381 Fourth Avenue, New York City. Please notice our new address.

## Cousin Sally's Club

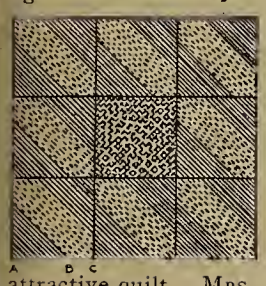
IT SEEMS to me that all over this big country of ours more and more boys and girls are hearing about this splendid club and are eager to join us in our work and play. If you have been wondering what it means to be a member of Cousin Sally's Club, and haven't got to the point where you feel like joining, let me say to you that you are making a vast mistake. I know every boy and girl who has joined has never regretted it, and you, too, will never regret it if you join. Send to-day for one of our beautiful buttons. The button is only five cents, and you can't help but like it. Every boy and girl who joins receives a letter from me, telling them about our club and what is expected of members. Be a member, too. Join us and see what a lot of pleasure you'll get out of the club. If you enter the contest the same time that you join the club, be sure to write your name, age and address on a separate sheet of paper. And please remember that no one over seventeen can join.

# The Housewife's Club

EDITOR'S NOTE—Monthly we give prizes of $2.00 for the two best descriptions (with rough sketch) of original home-made household conveniences or labor-saving devices, and $1.00 for the third best or any that can be used. ¶ We also give 25 cents each for helpful kitchen hints and suggestions, also good tested recipes that can be used. We would suggest that you do not send more than two recipes, and not more than five kitchen hints each month, because we receive so many that space will not allow us to print them all, in spite of the fact that they are reliable and practical. ¶ All copy must be in by the tenth of May, and must be written in ink, on one side of the paper. Manuscripts should contain not more than 250 words. We would suggest that contributors retain duplicate copy, as no manuscripts will be returned. The mail is so heavy that it is impossible for us to acknowledge receipt of manuscripts. Address "The Housewife's Club," care of Farm and Fireside, Springfield, Ohio.

### An Attractive Quilt Design

Three colors are used in this quilt-block, dark blue, light blue figure on white ground and light blue chambray for the center square. It is set together with squares of the lightest color. The blocks are nine inches square. The width from A to B is two inches and from B to C one inch. By following these dimensions the pattern will be easy to cut. These blocks make a very attractive quilt. Mrs. A. J. C., California.




### To Make Steak Tender

Put the steak in ice-cold water and let stand for about fifteen minutes. Roll it in flour before putting it in the frying-pan. Salt and pepper when it has been turned once. It will be tender and juicy. Try it.
Miss M. W., California.

### Storing Winter Clothes

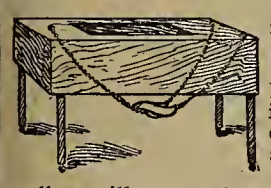
After using moth-balls, turpentine, etc., for preventing the buffalo moth, I was persuaded to try whole cloves, and for the past four years I have found that the moths do not stay where there are cloves. I put them in the bottom of trunks, chests, etc., in the folds of blankets, pockets of coats—in fact, all through the different garments. The cloves can be easily shaken out when the garments are needed, and the odor is quite agreeable.
Mrs. J. B., New York.

### Soft Gingerbread

One half cupful of lard or butter, one cupful each of milk and sugar, two of molasses, one teaspoonful of soda, two tablespoonfuls of cinnamon and one of ginger. Stir butter, sugar, molasses and spice together, add the milk and soda and lastly about four cupfuls of flour. Beat hard and bake in a loaf. Some seeded raisins will improve it. Add these last. Mrs. J. H., Ontario.

### Home-Made Baby-Walker

I have here a suggestion for the tired and worn-out mother whose baby is trying to walk. Have the man of the house make him a baby-walker, and save him all of those bruises and hurts, as well as your own back. Select a grocery-box of any size. Cut a hole in the middle nine by nine inches. Make the legs two by two by sixteen inches long. Place the legs inside the box in each corner and nail them securely. Put casters in the legs so the walker will move about freely. Now take a bicycle seat, fasten two small ropes to the spring under the back of the seat and one under the front of the seat and fasten them under the box as illustrated. Put baby in through the hole on top and watch him glide across the room. When he gets tired he'll sit down and rest. Put his playthings on the walker and notice the joy and pleasure he will have, while you will be able to accomplish your work in half the time.
Mrs. F. G., Illinois.



### Cleaning Straw Matting

Put three pints of bran in two quarts of water and boil. When it cools wash matting with it, drying it off well with a clean cloth. Add a little salt in the water for white matting and vinegar for red. C. M. B., Tennessee.

### Care of Rugs

The life of all rugs may be lengthened considerably by a little care. Never throw them over the line to beat them. They should be spread out on the grass and beaten first on one side, then on the other. To freshen them, take a mixture of two tablespoonfuls of borax, one tablespoonful of ammonia and one pint of water, and while it is quite warm apply with a small brush, rubbing against the nap. Take a soft cloth and rub dry, following the same lines as at first. Then brush with the nap, using a clean brush. M. B. G., Wisconsin.

### A Small Kitchen Cabinet

I have always found that the little articles used in the kitchen were the ones so hard to keep in a convenient place. If kept in a drawer it is necessary to search among the many to find the one wanted. To overcome this I have devised a kitchen cabinet just for small articles. As shown in the sketch, it is made of two boxes hinged together. One box closes into the other like a door. It gives twice the room for the same space than if an ordinary door were used. Drive nails or hooks for small articles that can be hung up. For knives, forks, spoons, etc., make narrow shelves and before fastening them in bore holes or make slots through the shelves so that the small part of the articles will slip through. Screw one box securely to the wall and let the other swing as a door. Mrs. M. B., Virginia.

### New Way to Cook Potatoes

Boil the potatoes in salt-water until done (as you would for mashing). Remove them from the water and dip each into beaten egg, then roll in cracker-crumbs and fry in hot grease to a light brown. These are delicious if cooked in this way.
H. M., Indiana.

### To Clean Brass

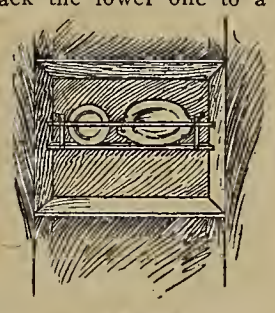
Pour ammonia on it, scour brass with a brush, rinse in cold water and polish with a soft dry cloth. Old or dirty brasswork can be cleaned in this way.
D. D., Minnesota.

### Chocolate-Frosting

This frosting requires no boiling. Take one teaspoonful of butter, three large teaspoonfuls of cocoa (or grated unsweetened chocolate), mix well together. Then add four tablespoonfuls of hot coffee; stir well. Add enough confectioner's sugar to thicken. Vanilla may be used if desired. This will make enough frosting for three layers, and will never get hard. This is most delicious.
Mrs. H. E. H., Ohio.

### Making the Best of a Small Cupboard

To save room in a small cupboard, fasten two narrow strips together by two short pieces five inches long. Tack the lower one to a thin board three inches wide to keep plates from slipping off. Rest this on two large nails driven in cupboard. Fasten top pieces to cupboard by making a hole in each end. Pass a long nail through hole, then through a spool three inches long to keep top same distance from back of cupboard as the bottom.
Mrs. S., Pennsylvania.



### To Keep Whipped Cream Firm

I have found that the way to prevent whipped cream from getting watery after standing a little while is to dissolve a little gelatin in two teaspoonfuls of water. The amount should be governed by the amount of cream one has to whip. Let it get cold and whip in the cream. Hours after it will be as firm as when first whipped.
Mrs. W. W. S., North Carolina.

### Washing Fine Embroidery

Fine pieces done in colored silk embroidery should never be put in the laundry. Wash quickly in warm suds made of any good white soap, rinse in tepid water; squeeze, but do not wring, or threads will be broken. Lay between linen towels for five minutes. Iron quickly on the wrong side, placing the right on several folds of soft white flannel with nothing between. The embroidery will stand out very handsome and full.
Mrs. W. W. S., North Carolina.

### A Handy Tray-Holder

I made this little tray to hold the pan used in mashing fruit or potatoes, etc. Many kitchen tables are so low that the worker has to stand bent over in the most uncomfortable position to do things of this kind and this little paring-stand does away with all the tiresome stooping and thus makes the task a lighter one. To make it, I took the lid of a large wooden bucket, inverted it so that the rim came on top and fastened it to four legs made from discarded broom-handles. The rim makes it impossible for anything to slip off the stand. I find this a very convenient household device. Mrs. J. G. C., Virginia.

### To Cleanse a Granite Teapot

If a granite tea or coffee pot has become discolored on the inside, fill it two thirds full of cold water. Add one teaspoonful of baking-soda and boil ten or fifteen minutes. Pour this out and scour with any good scouring-powder. This will easily remove every particle of the stain.
Mrs. D. H. B., Ohio.

### Old-Fashioned Corn-Cakes

Take two cupfuls of flour, one cupful of corn-meal, one cupful of sugar, one egg, one cupful of sweet milk, one tablespoonful of melted butter, two teaspoonfuls of baking-powder and a pinch of salt. Put in a shallow pan and bake in hot oven for fifteen or twenty minutes.
Mrs. J. L. W., Pennsylvania.

### Home-Made Oatmeal-Soap

This is the way I make bath-soap. I melt a large bar of pure white soap, then add two cupfuls of oatmeal and one teaspoonful of borax. Spread in a dripping-pan and when cool cut in cakes. Mrs. W. E. B., Florida.

### To Prevent Cake From Falling

Beat the whites of the eggs and mix well with the sugar, warm (not melt) the butter slightly and add. Beat all until light, then add the other ingredients, alternating the flour and milk till all are used, commencing with the flour to prevent curdling.
Mrs. A. J. C., California.

### For Stained Fingers

Have you ever tried using a weak solution of oxalic acid after preparing berries or discoloring vegetables? It is a quick stain-remover. As the acid is a poison, have the bottle labeled plainly and keep it away from the children. Where stains are under the finger-nails wrap a bit of absorbent cotton on the end of an orange-stick and dip in the solution. For lesser stains lemon-juice is helpful. Run the ends of the fingers into half a cut lemon. Tomatoes will also remove stains, especially those of paring potatoes or other slight discolorations. A tomato is a whitener and softens the hands.
Mrs. J. J. O'C., Washington, D. C.

### Hindoo Way to Cook Rice

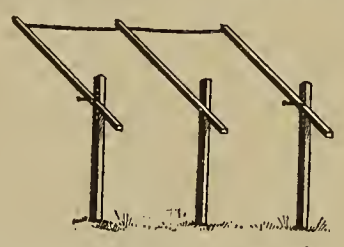
Here is a recipe straight from India: Take a kettle holding twelve or fifteen quarts and fill it half full of boiling water. Wash one pint of rice till the last water is clear. Then pour the rice slowly into the boiling water, so slowly that the water does not stop bubbling. Have the tea-kettle full of boiling water to add to the rice-water if it grows milky. "The water must stay clear and keep boiling," was the point emphasized. In ten or fifteen minutes the rice will be cooked. Place a colander over a large pan or bucket, pour rice and water in and turn kettle over and allow it to steam a few minutes.

We like it seasoned. Turn half of the rice back, at once, into the kettle, add a tablespoonful of sugar, half a teaspoonful of salt and half a cupful of milk, or milk and cream, also raisins. Place in oven till time to serve (five to fifteen minutes). Or, add vanilla to taste instead of raisins. The remaining half is treated the same way next day or made into a pudding. Mrs. E. G., Ohio.

### New Idea for a Clothes-Line

Take a six-foot post and drive it in the ground to a depth of three feet. It is not necessary to have the middle post as heavy as the end ones.

To support the end levers, fasten them to the posts as shown in the illustration, using a three-fourths-inch bolt. Bore three or four holes in the upright back of the bolts and use a wooden peg to adjust the line.
O. R. B., Connecticut.



### Fruit-Jelly

This is delicious and any fruit one may have can be substituted. Make a plain lemon-jelly and when it begins to set, have two oranges cut in small pieces, one bunch of white grapes split and seeded and one half cupful of hickory-nuts. First wet a dish or mold with cold water; then put a layer of jelly, then of the grapes, oranges and nuts, alternating until mold is filled. Set aside in a cool place to harden. The jelly is delicious as it is, but better if one chooses to serve whipped cream with it. N. R., Connecticut.

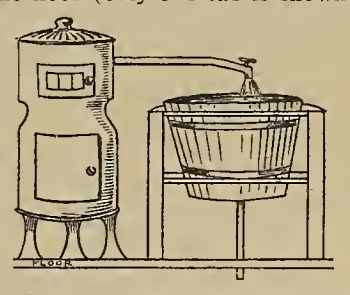
### For a Burn

I have recently discovered that if oil of peppermint is immediately put on the burn, it will not blister.
S. E. T., Maryland.

### A Practical Laundry

I live in the country where our only water supply is an old-fashioned tank with a windmill, from which we have water-pipes into the house. My family is a large one and for years the laundry work has been a problem. Last spring, however, I worked out the following plan by which I could have a laundry-room with hot and cold water.

In a small room adjoining the kitchen and near the tank, I placed two half barrels in lieu of tubs. These I fastened between two boards to make them a convenient height from the floor (only one tub is shown in the illustration). From the tank I ran two pipes through the wall of the room, one pipe going through the stove put in for that purpose to a faucet just over the tubs and the other going straight from the tank to the faucet. Holes were then bored in the bottom of the tubs and a drain-pipe run through them and the floor, to carry off the dirty water. I made stoppers by melting small bits of the lead pipes and pouring into a mold I had made in wet sand with the mouth of the pipes. For chains I used small safety-pins linked together.




The only thing actually bought was the piping and a small plumber's heater, which I have found very useful since, by the way, in many different household jobs that I have done myself. The whole thing did not cost me over five dollars and works quite as well as any modern city laundry.
Mrs. H. L. W., New York.

### To Cream Butter for Cake

Butter for cake is much easier creamed alone than with sugar. Simply take the allotted amount of butter and rub to a cream before adding anything else. It does not take nearly so long, is much easier and the grain of the cake is finer than when made in the ordinary way. This means a good deal to the habitual cake-maker and is not generally known among housewives.
Mrs. R. S. M., South Dakota.

# Sweet Peas for Table and Market

There is no other annual quite so satisfactory for cutting purposes as the sweet pea. One of its desirable characteristics is the length of time the blossoms keep fresh after being cut, which makes it a splendid flower for marketing purposes.

A woman in the Cape Cod county makes over two hundred dollars a year in selling sweet peas, and she has a very small plot of ground on which to grow them. The pure white sweet peas are always in demand for cemetery and funeral purposes; and the soft, pretty pink shades are favorites for weddings. A girl who lives near a well-known summer resort clears every year more than this on her sweet peas. She says, "Of all flowers raised for market I have had a greater income from my sweet peas than from any other, and that with less labor."

Sweet peas are very easy of culture, and will thrive in almost any soil under proper treatment, although they prefer a heavy, stiff loam that is cool and moist; but if your soil is light and sandy deep planting and mulching will help wonderfully. Well-rotted manure, lawn clippings or straw are all excellent for mulching, and this should be done throughout the hot, dry weather of midsummer. It is impossible to grow good sweet peas in a dry soil. For early blooming sweet peas should be planted in March, and in this case it is an excellent idea to have the trenches dug in the fall. Never plant later than April at any time. If the soil is not rich enough bring it to the proper fertility by digging into it well-rotted cow manure. If the soil is heavy dig the trench six inches deep, but if light and sandy twelve inches is none too deep. Cover the seed to the depth of an inch or two only, at first. As the plants shoot up, draw soil about them gradually until you have the trench filled. As soon as the plants are five or six inches tall provide a trellis for them, the most satisfactory of which is made of wire poultry netting about three feet wide. This should be tightly stretched between strong posts, and strengthen if necessary by lighter posts between. For profusion of bloom, plant where they will get the full sunlight all day.

An ounce of seed will sow about fifteen feet of row, and one can get seed of the common varieties which will prove very satisfactory at from ten to twenty-five cents an ounce; but the new "Spencer" variety will cost anywhere from fifty cents to one dollar an ounce, and some of the orchid-flowering sweet pea seed is sold at ten dollars an ounce. Of course, in raising for market one can charge in proportion to the grade of flowers, but amateurs are generally advised to start with the commoner sorts, and as a general thing they will prove the most profitable.

Seed sown in March should produce plants that will blossom freely in May, and all through June there will be a profusion of bloom without much care; but sweet peas as usually grown give but few flowers through July, August and September. To have bloom during these months have several rows on which every bud is picked as soon as it makes its appearance. Let few or no blossoms appear on these rows until July; then water freely if the weather is dry and cultivate frequently if soil is heavy. Or mulch if light, and you will be rewarded by a wealth of bloom until frosts come. They will bring a higher price at this season than earlier, when flowers are more plentiful. Remove every blossom as it fades and allow no seeds to form. This is very important if you wish continuous bloom. If you wish to grow your own seed for another year have certain rows set apart for this purpose and pick no flowers from them.

In cutting for the table or market be sure to cut sweet peas with long stems, unless intended for boutonnieres. Arrange them in an easy, natural way, never crowd them. They are lovely arranged in rose bowls for the table or in glass vases of wide mouth. Place the longest stemmed ones in the middle and let the others fall gracefully over the sides of the bowl.

They do not necessarily need much green with them, but if a bit of the vine with a curling tendril or two is cut with some of the blossoms the whole effect will be most natural and pretty.

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To introduce **THE HOUSEWIFE** to new readers, we will send it three months on trial, together with **SIX SPLENDID ROSE PLANTS** for only 25 cents. **THE HOUSEWIFE** is a clean, bright, helpful and practical household magazine devoted to: Latest Fashions, Embroidery and Fancy Work, Cooking, Mothers' Realm, Etiquette, Social Circle, Household Helps, Suggestions for Entertainments, Talks on Health, Serial Stories, Short Stories, Illustrated Articles of Interest, Hints in Economy, How to Earn Money, Floriculture Advice.

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are grown by a reliable house which has made Rose growing a specialty and a study for many years, and they have given attention to developing the plants that are best suited for sending by mail. The six Plants which we have selected are Popular and Handsome sorts, which will bloom rapidly and in great abundance in any part of the United States.

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# The Room of Many Shadows

[CONTINUED FROM PAGE 26]

"On the left?"

"She said the left," quoth the landlord, "though I don't see that it matters; it's all fancy with her."

"Go on," kindly urged Rodney.

"There was a window. I can't describe the little things."

"Possibly because there weren't any," whispered Rodney in his superior's ear.

Meanwhile the landlord and his wife awaited their advance with studied patience. As Miss Williams joined them, he handed her a bunch of keys, with the remark:

"None of these rooms are occupied to-day, so you can open them without hesitation."

She stared at him and ran quickly forward. Mr. Rodney followed. Suddenly both paused. She had lost the thread of her intention before opening a single door.

"I thought I could go straight to it," she declared. "I shall have to open all the doors, as we did in the other hall."

"Let me help you," proffered Mr. Rodney. She accepted his aid, and the search recommenced with the same results as before. The vigor of her step was gone, and as she paused heartsick before the last and only remaining door, she turned a face of ashes upon Mr. Rodney as he stooped to insert the key.

When the door fell back, he watched her for some token of awakened interest. But he watched in vain. Its smallness, its bareness, its one window, the absence of all furniture save the solitary cot drawn up on the right (not on the left, as she had said), seemed to make little or no impression on her.

"The last! the last! and I have not found it. Oh, sir," she moaned, catching at Mr. Rodney's arm, "am I then mad? Was it a dream? Or is this a dream? I feel that I no longer know." Then, as the landlady officiously stepped up, she clung with increased frenzy to Mr. Rodney, crying, with positive wildness, "*This* is the dream! The room I remember is a real one and my story is real. Prove it, or my reason will leave me. I feel it going—going—"

"Hush!" It was Rodney who sought thus to calm her. "Your story *is* real and I will prove it so."

He had observed the corners of the landlord's hitherto restrained lips settle into a slightly sarcastic curl as the door of this room closed for the second time.

## Chapter II.

"THE girl's beauty has imposed on you."

"I don't think so. I simply credit her story more than I do that of Stetson's."

"But his is supported by several witnesses. Hers has no support at all."

"That is what strikes me as so significant. Who are his witnesses? His wife and his head man. There is nobody else. In the half-hour which has just passed I have searched diligently for some disinterested testimony supporting his assertion, but I have found none. No one knows anything. Of the three persons occupying rooms in the extension last night, two were asleep and the third overcome with drink. The maids won't talk. They seem uneasy, and I detected a sly look pass from the one to the other at some question. They seem uneasy. There's a conspiracy somewhere."

"Nonsense! What should there be a conspiracy about? You would make this old woman an important character. Now, we know that she wasn't. Look at the matter as it presents itself to an unprejudiced mind. A young and susceptible girl falls in love with a man, who is at once a gentleman and a scamp. She may have tried to resist her feelings, and she may not have. Your judgment and mine would probably differ on this point. What she does *not* do is to let her mother into her confidence. She sees the man—runs upon him, if you will—in places or under circumstances she cannot avoid—till her judgment leaves her and the point of catastrophe is reached. Then, possibly, she awakes, or what is more probable, seeks to protect herself from the penetration and opposition of his friends by meetings less open than those in which they had lately indulged. She says that she left the house to escape seeing him again last night. But this is not true. On the contrary, she must have given him to understand where she was going, for she had an interview with him in the woods before she came upon her mother. He acknowledges to the interview. I have just had a talk with him over the telephone."

"Then you know his name?"

"Yes, of course, she had to tell me. It's young Hamilton. I suspected it from the first."

"Hamilton!" Mr. Rodney's cheek showed an indignant color. "You called him a scamp a few minutes ago. A scamp's word isn't worth much."

"No, but it's evidence when on oath, and I fancy he will swear to the interview."

"Well, well, say there was an interview."

"It changes things, Mr. Rodney. It makes possible a certain theory of mine which accounts for all the facts."

"It does!"

"Yes. I don't think this girl is really responsible. I don't believe she struck her mother or is deliberately telling a tissue of lies to cover up some dreadful crime. I consider her the victim of a mental hallucination, the result of some great shock. Now what was the shock? I'll tell you. This is how I see it, how Mr. Stetson sees it and such others in the house as have ventured an opinion. She was having this conversation with her lover in the woods below here when her mother came in sight. Surprised, for she had evidently not expected her mother to be so prompt, she hustled her lover off and hastened to meet the approaching figure. But it was too late. The mother had seen the man, and in the excitement of the discovery made such a sudden move that her foot was caught by one of the roots protruding at this point and she fell her whole length and with such violence as to cause immediate death. If, as I believe at this point in the inquiry, Miss Williams had encountered a passionate opposition to her desires from this upright and thoughtful mother, the spectacle of this mother lying dead before her, with all opposition gone and the way cleared in an instant to her wishes, but cleared in a manner which must haunt her to her own dying day, was enough to turn a brain already heated with contending emotions. Fancies took the place of facts, and by the time she reached this house had so woven themselves into a concrete form that no word she now utters can be relied on. It is on this basis I shall act."

Rodney said in a restrained tone:

"Perhaps you are justified. I have no wish to force my own ideas upon you; they are much too vague at present. I will only suggest that this is not the first time the attention of the police has been drawn to this house by some mysterious occurrence. You remember the Harding case? There must have been notes to the amount each of seven thousand dollars in the pile he declared had been taken from him some time during the day and night he lodged here."

"Harding! I remember something about it. But they couldn't locate the theft here. The fellow had been to the fair in Farnhurst and couldn't swear that he had seen his notes after leaving the grounds."

"I know. But he always looked on Stetson as the man. Then there is the adventure of little Miss Quigley."

"I don't remember that."

"It didn't get into the papers; but it was talked about in the neighborhood. She took a notion to spend a summer here—in this house, I mean. She had a room in one of the corners overlooking the woods, and was happy enough till she began to miss things—rings, pins, a bracelet and, finally, a really valuable chain. She didn't complain at first—the objects were trivial. But when the chain went, the matter became serious, and she called Mr. Stetson's attention to her losses. He advised her to lock her door, but she continued to miss things though various domestics were dismissed. At last, after she notified the police, a detective was sent. I have always wished I had been that detective. The whole matter supposedly ended in a joke for he proved that it was a magpie who had done the stealing. He found the bird's nest encrusted with jewels, but the chain was not there. I have always thought that the bird had an accomplice."

The coroner smiled. There was little conviction and much sarcasm in that smile. Rodney turned away. "Have you any instructions for me?" he said.

"Yes, you had better stay here. I will return in the morning with my jury. It won't take long after that to see this thing through."

The look he received in reply was happily hidden from him.

"Yes, I'm going to stay here to-night. As it's a mere formality, I shall want a room to sit in, and if you have no objection I'll take No. 7 on the rear corridor."

"I'm sorry, but No. 7 is totally unfit for use, as you've already seen."

"Oh, I'm not particular. Put a table in and a good light, and I'll get along with the rest. I have something to do. No. 7 will

[CONTINUED ON PAGE 31]


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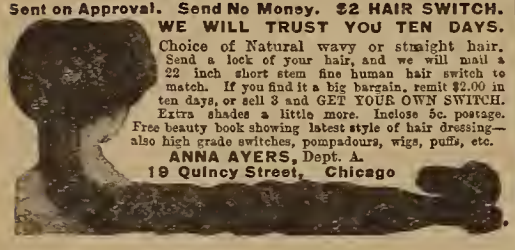

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Montgomery Ward & Co., 19th and Campbell Sts., KANSAS CITY, Chicago Avenue Bridge, CHICAGO

# The Room of Many Shadows

[CONTINUED FROM PAGE 30]

answer." The landlord cast a quick scrutinizing look at the other's composed face and threw back his head with a quick laugh.

"As you will. I can't make you comfortable on such short notice, but that's your lookout. I've several other rooms vacant."

"I fancy that room," was all the reply he got.

Mr. Stetson at once gave his orders. They were received by Jim with surprise.

Fifteen minutes later Rodney prepared to install himself in these desolate quarters. But before doing so he walked straight to the small parlor where he had last seen Miss Williams and, knocking, asked for the privilege of a word with her. It was not her figure, however, which appeared in the doorway, but that of the landlady.

"Miss Williams is not here," announced that buxom and smooth-tongued woman. "She was like to faint after you gentlemen left the room, and I just took her up-stairs to a quiet place by herself."

"On the rear corridor?"

"Oh, no, sir; a nice front room; we don't consider money in a case like this."

"Will you give me its number?"

Her suave and steady look changed to one of indignation.

"You're asking a good deal, aren't you? I doubt if the young lady—"

"The number, if you please," he quietly put in.

"Forty-four," she snapped out.

"If the young lady is worse," he said, "you will communicate the fact to me. You will find *me* in No. 7."

He had turned back to make this reply, and was looking straight at her as the number dropped from his lips. It did not disturb her set smile, but in some inscrutable way all meaning seemed to leave that smile.

"No. 7," he repeated. "Don't forget, madam." And then he started for the stairs.

Jim and a very sleepy maid were on the floor above when he reached it. He paid no attention to Jim, but he eyed the girl somewhat curiously. She was comparatively a new domestic in the tavern, having been an inmate there for only three weeks. He had had a few minutes' conversation with her during that half hour of secret inquiry in which he had previously indulged and he remembered some of her careful answers, also the air of fascination with which she had watched him all the time they were together. He had made nothing of her then, but the impression had remained that she was the one hopeful source of knowledge in the house. Now she looked dull and moved about in Jim's wake like an automaton. Yet Rodney made up his mind to speak to her as soon as the least opportunity offered.

"Where is 44?" he asked, as he moved away from them.

"I thought you were to have room No. 7," blurted out Jim.

"I am. But where is 44?"

"'Round there," said she. "A lady's in there now. The one—"

"Come on," urged Jim. "Hester, you may go now. I'll show the gentleman his room."

Hester began to move off, but not before Rodney had caught her eye.

"Forty-four," he formed with his lips, showing her a scrap of paper which he held in his hand.

He thought she nodded, but he could not be sure. Nevertheless, he ventured to lay the scrap down on a small table he was passing, and when he again looked back, saw that it was gone and Hester with it.

Would she take it to Miss Williams as he hoped, or to Stetson? It was a risk, but it was worth the risking.

They had done little more than he asked to make No. 7 habitable. As the door swung open under Jim's impatient hand, the half-lighted hollow of the almost empty room gaped uninvitingly before them, with just a wooden-bottomed chair and a rickety table added to the small cot-bed which had been almost its sole furnishing when he saw it last. The walls, bare as his hand, stretched without relief from base-board to ceiling, and the floor from door to window showed an unbroken expanse of unpainted boards, save for the narrow space between chair and table, where a small rug had been laid. A cheerless outlook for a tired man, but it seemed to please Rodney. There were paper and ink on the table, and the lamp which he took care to examine held oil enough to last till morning. With a tray of eatables, this ought to suffice, or so his manner conveyed, and Jim, who had already supplied the eatables, seeing that there was nothing more to do here, was backing slowly out when his eye, which seemingly against his will had been traveling curiously up and down the walls, was caught by that of Rodney, and he plunged from the room, with a flush visible even in that half light.

It was a trivial circumstance, but it fitted in with Rodney's trend of thought at the moment, and when the man was gone he stood for several minutes with his own eye traveling up and down those dusky walls in an inquiry which this distant inspection did not seem thoroughly to satisfy, for in another instant he had lifted a glass of water from the tray and, going to the nearest wall, began to moisten the paper at one of the edges where it was quite wet. He took out his penknife, but before using it, he looked behind him first at the door, and then at the window. The door was shut; the window seemingly guarded by an outside blind; but the former was not locked, and the latter showed, upon closer inspection, a space between the slats which he did not like. Crossing to the door, he carefully turned the key, then, proceeding to the window, he endeavored to throw up the sash that he might close the blinds more effectually. But he found himself balked in the attempt. The cord was broken and the sash refused to move under his hand. Vaguely disturbed, he stepped back, then hurried forward again and endeavored to peer out between the slats to see if by any possibility he could be seen from below or from the roof of any of the surrounding outhouses. But the room was too light for anything to show outside beyond the pane, and considerably disconcerted he again stepped back, when a new suspicion seized him, and plucking at the broken cord, he drew it out and looked carefully at the severed ends. They were smooth and even; *the cord had been cut.* With a glance of mingled threat and sarcasm cast out into the night, he walked back to the wall and, dashing more water over the spot he had already moistened, began to pick at the loosened edges of the paper which were slowly falling away. The result was a disappointment; how great a disappointment he presently realized, as his knife-point encountered only plaster under the peeling edges of the paper. He had hoped to find other paper under the blue—the paper which Miss Williams remembered—and not finding it, was conscious of a sinking of the heart which had never attended any of his miscalculations before. Were his own feelings involved in this matter? It would seem so. He was astonished at his own sensations. He could hardly believe that it was his heart which was throbbing so imperiously. Had beauty wrought this spell? If it had, it was pitiable. His mind was filled with forebodings. But he shut them out. The light in her face—ah! he would trust that light. He would lift this girl, who seemed to be now living in his heart, from out the mesh of tangled lies that were fast engulfing her. Crossing back to the table, he sank into the chair beside it and tried with all his strength to think and to think along common-sense lines. But a glamor seemed to surround him. She, this witching girl, was crowding out every other thought.

If he listened, it was to hear her voice raised in appeal at his door. If he closed his eyes, it was to see her image more plainly in the background of his consciousness. The house was quiet. There was naught to distract his mind, and when he dozed, as he did for a while after midnight, it was to fall under the conjuring effect of dreams in which her form dominated with the added force of a relieved fancy. The picture which his imagination thus brought before him was startling and never to be forgotten. It was a toppling city, massed against impenetrable night one moment, then shown to its awful full next by the sudden tearing through of lightning-flashes. He saw it all—houses, churches, towers, erect and with steadfast line, a silhouette of quiet rest awaiting dawn; then at a flash, the doom, the quake, the breaking down of outline, the caving in of walls, followed by the sickening collapse in which life, wealth and innumerable beating human hearts went down into the unseen and unknowable. He saw and he heard, but his eyes clung to but one point, his ears listened for but one cry. There at the extremity of a cornice, clinging to a bending beam, was a figure—a woman. He could see the straining muscles of her arm, the white despair of her set features. He wished to call aloud to her not to look down—then, as the sudden darkness yielded to another illuminating gleam, his mind changed and he would fain have begged her to look, slip and end all, for subtly, quietly, ominously somewhere below her feet, he had caught the glimpse of a feathery line of smoke curling up from the lower debris, and no power remained to shut his eyes or stop his ears, or deaden his nostrils. He smelled the awful flame, while all was dark, he smelled the approach of the creeping devil and—

Horrors! it was no dream! He was awake, he, Rodney, in this small solitary hotel, and there was fire, real fire in the air, and in his ears the echo of a shriek such as a man hears but few times in his life, even if his lot casts him continually among the reckless and the suffering. Was it *hers?* Had this dream been a forerunner of danger to her? or—he was on his feet, his eyes staring at the floor beneath him, through the cracks of which wisps of smoke were forcing their way up. The tavern was not only on fire, *but on fire directly under him.* This discovery woke him effectually. He bounded to the door and endeavored to unlock it. The key would not turn; it was hampered in the lock.

[CONCLUDED IN NEXT ISSUE]

## Seed Thoughts for Easter

The miracle of spring, with its vision of life arising out of seeming death, but symbolizes the great mystery of immortality.

The resurrection of Christ was not an extraordinary event, but simply an extraordinary evidence of an ordinary event.

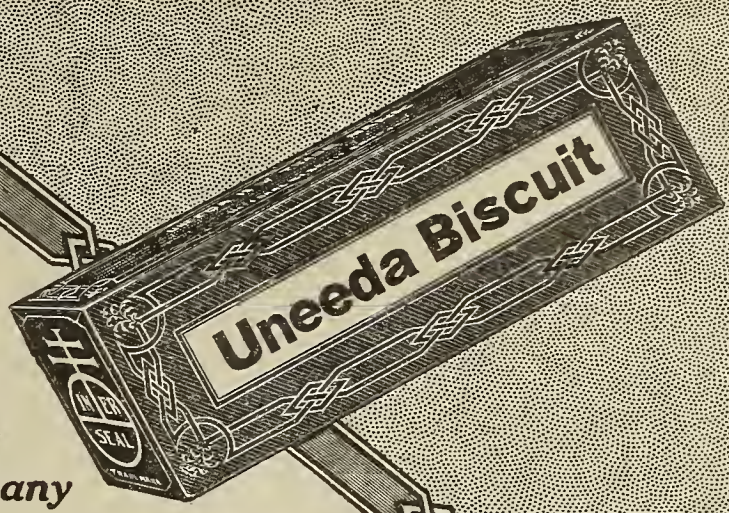
Each time the sun sets for us it means a sunrise for someone else. The parting here means a reunion yonder.

## Easter Flowers

From their long sleep the flowers rise
To see the Easter morning dawn
And show us that the semblance of
Their death, at last, has really gone.
Their day of resurrection comes
As Easter anthems fill the air;
The glory of the risen Lord,
The little flowers come to share.

They've slept the long, cold winter through,
And with the coming of the spring,
They don their fragrant, dainty robes,
And to us, Easter tidings bring.
We welcome them with pure delight,
So glad they make the earth look fair,
No more, as in the winter days,
Will earth look cold and brown and bare.

MARTHA SHEPARD LIPPINCOTT.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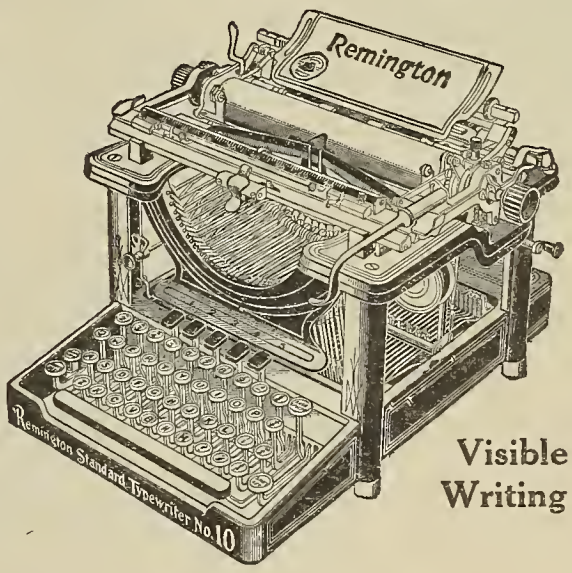


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## The National Farm Paper

ESTABLISHED 1877

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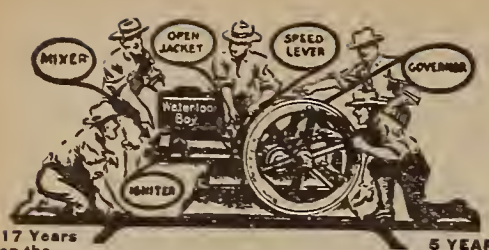
Another Great Horse Article by David Buffum—On Page Five

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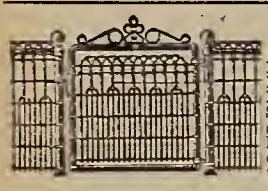

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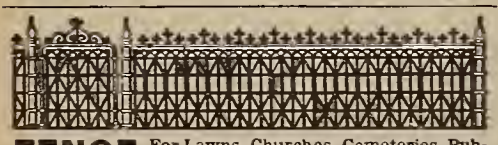

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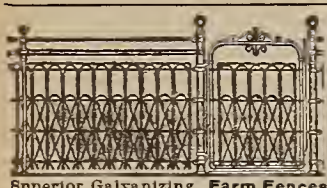

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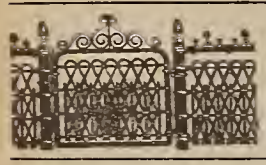

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# With the Editor

I'VE just had a talk with Bemies. Do you happen to know who Bemies is? No? Well, he's the Reverend C. O. Bemies, pastor of the Presbyterian Church at McClellandtown, Pennsylvania.

You think I ought not to call him "Bemies"—short off, like that. It's the greatest compliment I can pay him. It involves the thought that there is no other Bemies—which is the truth.

He is the running-mate of McNutt of DuPage, Illinois, in the great work of making the rural church worth something. Do you remember that once in this column I startled you by asking whether or not the rural church is to live or die? Well, it is still dying—except in spots. It isn't dying in McNutt's parish, nor in Bemies'.

And if there were ten thousand pastors like these two in the United States, the rural church would at once leap into leadership in the making of our rural life what it should be. Bemies says (I am quoting, but condensing a little):

"1. The rural pastorate is a specialized calling, demanding a high grade of Christian manhood and adjustive training."

Do you get that? It takes real men, original men, and specially trained men for rural pastors. The skips and culls of the city yards won't do.

"2. It must have more permanency and definiteness of purpose."

Do you see his point? He stayed eight years in one church before he found the way to make the church really rural. And he began at two hundred dollars a year. The charge is a better-paying one now. Again Bemies says:

"3. There should be an increasing development of the Biblical and modern conception of the Kingdom of Heaven among men, by infusing the Spirit of the Master Man into an adaptive progress of the moral, social, civic, intellectual, economic and communal life of the rural parish."

Note the words "civic," "intellectual," "economic"—the new Bemies touch is in them. If you think the church has nothing to do with "economic" things, you differ from Bemies. For he goes on:

"4. As God is everywhere, and His power creates and possesses everything, and His spirit of life animates all living things, the earthly Kingdom of Heaven relates to every thought and activity of human life."

In other words, while religion concerns itself with things of the next world, it mustn't forget that we live in this world. Bemies doesn't.

* * *

I'M GOING to skip sections 5, 6, 7, 8 and 9 of the thesis which he has nailed to the rural church-door. They are interesting, but I have to have some of this space myself. In essence, they assert that peace, happiness and prosperity are things to be accomplished by religious activities. What does he mean by "prosperity" in this connection? He means plain, every-day prosperity—better farming, better hogs and cows and guaranteed eggs. "If Christianity," says Bemies, "doesn't belong in every part of life, it doesn't belong in any part." Bemies says further:

"10. The rural pastor should be able to guide the development of the human and natural resources of the community, according to the unity of the earthly kingdom."

And so Bemies, having preached better farming to his people for ten years with indifferent success, has taken a three-hundred-acre farm and is going to put on the whole armor of God in the shape of overalls and wammus. I wish we could all listen to his sermons for the next few years!

In Articles 11 and 12 he tells us that the meek shall inherit the earth, and the pastor should help them do it; and that, instead of "secularizing" the church by making it a farming influence, he is spiritualizing the farmer's life. And he adds, "There is nothing secular but sin." In the next Article of Faith he says:

"13. The rural church is the community center, and the rural pastor is the community builder."

What he means, of course, is that these things should be. And Bemies is such a builder. He saw the need of a township high school, years ago. He used all his powers of persuasion to have one established. Finally, one fine day, the school board voted the high school. I believe it was the first township high school in the state to have a course in agriculture. And note, he says "community builder." He doesn't say "community manager"—not he! He doesn't try to run this high school, for instance. He tries to be a builder, not an autocrat. He is a believer in democracy, you see; for later he says:

"14. Every rural church should learn to rely on herself and to develop her human and natural resources for progress and prosperity.

"15. Every rural community should be practically self-sufficient in its religious, moral, intellectual, social, economic, recreative and general welfare."

In other words, every tub should stand on its own bottom. The rural community should not go with its knuckle in its eye to the synod or conference or convocation and ask for help. It should help itself. And don't think for an instant that Bemies had a wealthy parish that needed waking up only, in order to pour forth plenteous revenues—quite the contrary. It is a poor parish. That is, the people as a rule are not well-to-do—but they have a limestone soil, and if they keep waking up, they will be rich one of these days. Here's another quotation from Bemies Creed:

"16. In order to accomplish results for the earthly kingdom, the rural pastor should coöperate as much as possible with all existing organizations formed for the general or particular welfare of the community; for every institution designed to promote true progress in education, agriculture, morals, industry, science, good government, social life, economic conditions or anything which advances the happiness and prosperity of the community and nation—a conscious or unconscious effort of humanity to help bring in the Kingdom of Heaven. Where there are no such existing institutions the rural pastor and church should supply them."

* * *

SO SAYS Bemies. He means that where the Kingdom of Heaven (meaning prosperity as well as righteousness) has working for it any organization or agency, no matter whether that agency knows what's it's up to or not, the rural church should help, not hinder, and shouldn't try to hog the whole job—there being quite enough to do everywhere. If Bemies were in Page County, Iowa, he would be helping Jessie Field with her school work; in Wake County, North Carolina, he'd be aiding County Superintendent Zebulon Vance Judd; in any Southern neighborhood where Doctor Knapp's missionaries are at work with their corn clubs, he'd be helping Knapp; in Greene County, Iowa, where the rural Y. M. C. A. is really making good, he'd be boosting that work. To a soldier like Bemies there's splendid fighting all along the line. [CONCLUDED ON PAGE 16]

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Vol. XXXIV. No. 14 Springfield, Ohio, April 25, 1911 PUBLISHED SEMI-MONTHLY

Be sure you're right—and even then say little.

Manure is a good thing to have concealed about your land.

High thinking is all right, but it should not be so high as to be out of sight of the hands.

On this page we publish an amusing burlesque of the arguments of the anti-parcels-post people, sent us by an Oklahoma reader.

This is a reminder to each of us to get busy with a pen and stir up our representatives in Congress—now, in time to catch them at their extra session.

## Water-Power and Prosperity

THE completion of the great Roosevelt Dam in Arizona again focuses the attention of the nation on the Reclamation Service. Franklin H. Newell, who, under the Ballinger régime, has been under fire from those in authority, must have been a happy man the day the great Roosevelt Dam was put into commission, in the month that saw Ballinger superseded by Fisher—always a friend to conservation—as Secretary of the Interior. Mr. Newell is one of the great men of the time. To him, and in scarcely less degree to Arthur P. Davis, chief engineer of the Reclamation Service, belongs the honor of originating the policy of reclaiming our arid lands—a policy which will not stop until all the reclaimable swamp, as well as arid lands, shall be made useful. Roosevelt made their policies his own, and shares with them in the glory.

A letter from Phœnix, Arizona, calls attention to the prospects for prosperity which the future holds out to the settlers on the irrigation projects, not only from their lands, but from the collective ownership of water-power. The Roosevelt Dam will generate power to the amount of 27,000 horsepower. This is equivalent to a coal-mine on every farm—for power is heat, light and everything that coal is—except dirt. Our correspondent says that this power is worth fifty dollars a year per "H. P." It may easily be worth that in Arizona, delivered at the motor. This power, which belongs to the owners of the land, may some time be a by-product equivalent to a high rental on the 240,000 acres of the Salt River project. Other irrigation projects may be assumed to possess power proportionately valuable.

There is a lesson in this for the general policy of conserving our water-powers. Not one of them still owned by the people should be allowed to pass into private hands, except on terms which will secure the unearned increment of value in them to the people.

The Swiss people are engaged upon a project for harnessing the streams which fall from the Alpine heights of Switzerland for the purpose of operating the railways by electricity, and of furnishing an enormous output of power for factories. This power is expected to earn great revenues for the government, after paying good dividends to all the capital engaged.

When one thinks of the advantages to settlers of the power generated at the dams of the irrigation projects—especially those to be anticipated for the future when power will be more precious than now, the regret arises that we could not have had the foresight to retain for the benefit of all the people all the water-power of all the states. It is the old story of the superiority of foresight to hindsight. But as to the power-sites still in the public domains, no lack of foresight can be urged as an excuse for their alienation.

## Chilean Clover and Chilean Dodder

A GOOD deal of red-clover seed is coming in from Chili. It is fine-looking seed, plumper and darker than the domestic seed, and has four hundred and fifty seeds of dodder for every square rod of ground on which it is sowed. Look out! Have every pound of seed carefully analyzed for foul seed before sowing it in your fields.

## Another Philippine Conquest?

THE army of the United States now camps on the frontiers of Mexico. No one but Taft and his advisers can say why. There may be some proper reason for this demonstration of which we are ignorant, and which cannot properly be made public under the rules of etiquette that control diplomacy. But the real reason has not at this writing been given out.

It has been said on the part of the government that these are merely practice manœuvers and field drills. This is not true, however, nor now urged as true by the administration. The equipment of the troops and many other circumstances are proof conclusive that the movement has something to do with possibilities of real fighting.

It has been said in apparently authorized interviews that the President means to intervene to stop the civil war in Mexico. But in answer to the storm of protest which arose at the suggestion, we have had assurances that no intervention will be made except by authorization of Congress. President Taft knows the law and is aware that he could not legally make war without such assurance—and that intervention means war.

We, as a nation, have no right to crush out the insurrection in Mexico. Neither have we the right to aid it.

### Letter to a Kongressman

Don't yu vote fur no Parcils Post bill. If the farmur nedes a nickles wurth uv nales or a paper uv koffee he kin hitch up an kum to town an git em.

The farmur is a fule anyhow. The fackt that he has not kompelled Kongriss to give him a Parcils Post long ago pruves it on him. The heft of yure constitootents are merchants an owners uv stock in the Express companys. This stock only pays about 85 per sent dividens, which haint enuff. Wave the flag over a yunited kuntry an bete that fule bill to deth.

MARK ANTHONY SWIPES.
Dealer in General Mdse., Criss Cross Corners.

We do not know who is in the right, and it would make no difference if we did. Our national birth was in insurrection, and we ourselves have had the most dreadful civil war in history. The quarrel is that of the Mexican people, and we have no right to intervene because the war is disorderly or because the property of Americans is damaged. War is always disorderly. Investments in Mexico were made in the knowledge that war might sometimes break out, just as investments by British subjects were made here before our civil war subject to the same risk. The common people of America, who do the fighting and dying, the mothers and wives who furnish the tears, the boys who furnish the blood and the peaceful people who suffer the agony will call to stern account the Congress and the executive who make war on or invade Mexico to quell disorder or to protect investments. So long as American rights are not specially attacked, but only take their chances along with the rights of others, we cannot complain. We have stood by, as we were obliged to do, while the bonds of the Mexican people have been drawn tighter and tighter by tyranny, and we must not now attack the victim because he struggles or screams. It is Mexico's affair, not ours.

We do not want another Philippine occupation in Mexico. Such a thing would mean a century of fighting. It ought to mean it. The annexation of Mexico is impossible. For one reason, it would give us twenty or more new states, the people of which would hate us and be unable to live with us quietly in the same national house. For another, it would blow the whole tariff system sky-high, and the protected interests would never consent. Mexican wool, Mexican beef, Mexican ore, Mexican oranges, pineapples, sugar, tobacco, lemons, lumber and all the inconceivably numerous productions of Mexico would render her admission a political question in which every manufacturer, farmer, stock-raiser and laborer would have and express a personal concern. The selfish interests are already in existence which could and would keep out the conquered Mexico, if we should ever conquer her.

Therefore, the best that could be expected of Mexican occupation would be a campaign for the restoration of order—without much reference to justice—and the assumption of an obligation to intervene again when order should be again disturbed and so on forever, with the protection of investments as our only excuse. The worst that could happen, and the most likely thing, would be generations of bloody guerrilla warfare, and the brutalizing and cruel incidents of the Philippine occupation, right at our doors, and on a scale that would carry our invading troops clear to Yucatan and Central America. This would mean a larger standing army, large taxes and sixty years of an increased pension roll.

Annexation, as has been suggested, is impossible. Patriotism would fight against the dilution of our average citizenship by the incorporation of the millions of Mexicans, and selfishness would fight against it because it would destroy the protective system. Our only alternative is keeping out of Mexico or entering upon a war of conquest. Such a war, for any financial reason—for any reason less than national self-preservation—would be a crime against our own institutions and against humanity. We cannot believe that the administration, nor Congress, can be brought to the commission of this enormity. But why are the troops in the field?

## Reciprocity and Rabies

WE ARE disposed to sympathize with our contemporaries and readers who get excited about Mr. Taft's proposed reciprocity treaty with Canada. We agree with them in the belief that the interests of the farmer have been quite neglected in drawing the agreement. We think that it is an unfair, jug-handled delusionary piece of legislation so far as the farmer is concerned.

And yet we can't get excited nor do any successful frothing at the mouth about it. The reason is that we don't believe it will hurt the farmers if passed. There is a text which says "To him that hath shall be given, and to him that hath not shall be taken away even that which he hath." We think this applies with much force to the protection supposed to be taken from the farmer in this treaty.

Some souls seeking truth have wondered if the inspired writer could have said that what he hath can possibly be taken from a man that hath not anything, and have suggested that the Scripture must mean "to him that hath not shall be taken even that which he seemeth to have." This doesn't seem to let us out of the difficulty, as it would appear as hard to take a thing from a man when he only seemeth to have it, as when he actually hath it.

We leave this, however, as the late Mr. Nye, "to the thinking mind, not having that sort of mind ourselves." But we think the farmer of the United States will not be hurt by having taken from him a protection which he only seems to have. And the subject may become clearer for the removal of the thing which only seems. So, while we don't defend the reciprocity pact, we shall not wear crêpe when it passes. We don't expect ever to meet a farmer who will notice the difference.

The farmer need not expect parcels post as long as he is so far away, both bodily and mentally, from his congressman, while the enemies of parcels post are "Johnnie on the spot" to lobby against the passage of such a measure. A short personal letter to your congressman, urging parcels post, will help to counterbalance this influence of the lobbyist on our legislators.

# Composition On Farming—By Theodore Roosevelt Smith. 2½ YOU

SOME folks may sing the praises of a life on the ocean wave, but a farmer's life is the life for me. Our Hired Man is named Pete Williamson and he used to run a team for a wood-yard in Fort Worth and he says there's a lot to city life that's punk. He's worked for folks all over the world and has had a great life—but he don't like to milk. He says his gran'father got kicked over by a cow once back in Vermont, and all his folks have been afraid of cows ever since.

The worst danger he ever escaped, he said, was in not taking a job he once had offered him in Adams County, Ohio. And then pa said he thought the horses had got done eating, and they'd better hook up. Pa is township committeeman, but our dairy herd is free from contagion. We have had them tuberculined. Our Hired Man says that Jake Dingman says he'd have his herd tested if he wasn't so mortal afraid they've got the disease.

I think it is awful to be nervous. I am only nervous before I go to sleep and after I have read Grimm's fairy-tale about dragons. I am not at all nervous about cows. Ma says that all the hired men we ever had have been descended from that same Vermont man that was kicked over by the cow. Vermont is bounded on the north by the Dominion of Canada, on the east by Maine, on the south by Massachusetts and on the west by the rest of the United States, and produces Green Mountains and Morgan horses. The people are noted for being honest and pious; but our Hired Man says that the piousest man he ever worked for never kicked because his hens laid on Sunday.

Our Hired Man went to the city this winter, and when he came home he had a black eye. He said he got it by joking with an Irish restaurant-keeper. I asked him what the joke was, and he thought a while and said that he asked the restaurant-keeper a conundrum, and the man was mad at the answer. I asked him what the conundrum was, and he thought a while and said that he asked the Irishman what was the difference between the turnstile in front of the court-house and the price of mutton on the Irishman's bill-of-fare. And the Irishman thought and thought, and gave it up. Then William Peterson replied: "One is a rotating gate, and the other is a goat ating rate," and then it happened. Our Hired Man says that when he caught a freight out of town they were taking the other man's remains to the city dump; but pa says that he thinks it was breathing the night air of the city that made William Peterson's eye black—while as for me, I do not know what to think.

Our Hired Man

The farm is a good place for automobiles, and our Hired Man says that if the automobile had been invented first, the horse would never have been thought of. No machine has ever been devised by the wit of man to take the place of the cow on the farm. In Chicago they have factories owned by a member of Congress, where they make butter of the parts of critters that ain't meat, but the milking-machines at Mr. Cotter's Dairy have to have cows hitched to 'em. Our Hired Man says the cows are to prime the machine. Mr. Cotter says the motto of his Dairy is "Speak to a cow as you'd speak to a lady," but our Hired Man says that the Brown Swiss or Holsteins may stand for that, but if you'd yell at Jerseys that way, they'd hold up their milk, they'd be so scared, the way they speak to ladies in lots of families he's worked for. But my rule is to speak gently, it is better far to rule by love than fear—only when my dog Ring gets after my calf which I am raising.

Life on the farm is a life of honest industry, and our Hired Man says he believes after working all over the world he's found honesty and industry neck and neck, and where they didn't have the one they didn't have the other. But he says that if the farmers he's worked for had been as industrious with their heads as they were with their hands, they'd all been President of Life Insurance Companies or other geniuses.

Some farmers plant their crops in the ground and some in the moon; but the ground should be in good tilth, and you should test your seed-corn ear by ear as we have to do in school. Signs don't affect crops, but our Hired Man says that a full crop is a good sign of a happy chicken. He don't believe in signs either, but he says thirteen is an unlucky number if you sell thirteen eggs for a dozen.

Rules are better to go by than signs for the farmer; thus you obtain rotation in crops and noodles on the roots of the legumes. It is a poor rule that won't work both ways; still, our Hired Man says that "Look where you go" is a good rule, but "Go where you look" would put a cross-eyed man into both fences at once if he followed it. The Teacher is getting ready to hear my class in constitooshun, so I must stop.

Our district is number nine and I came out seventh from the first and third from the last in our spelling-match last week. Next year I'm going to a consolidated school and ride both ways in a 'bus.

# Fight Drought With Fertility

## How the Richness of Soil Makes Up for Lack of Moisture—By John A. Widtsoe

DROUGHT is an ancient and honorable foe. It is not confined to the arid regions where the rainfall is the critical element in agriculture, for in humid regions, likewise, a combination of conditions arises every few years which makes it impossible for plants to obtain the water necessary for their growth. Any principle that may be used to prevent drought would tend to give agriculture the stability which it must possess before it can rightly be called a science.

### The Amount of Water Plants Normally Require

Unfortunately, the determining function of water is not well understood by farmers. Especially is this true in the humid regions, where the annual rainfall is ordinarily abundantly ample to produce profitable crops. It should always be remembered that plants consume great quantities of water, which are taken from that stored in the soil; sucked into the roots; passed through the stems, and finally evaporated from the leaves. In the sketch shown at the head of this column the large bottle shows the amount of water required to grow the wheat in the small bottle. From the beginning to the end of the plant's life there is a steady current of water passing from the leaves. If this current is broken for any length of time, the plant usually dies.

The quantity of water thus passing through a plant has often been measured and found to be, in humid regions, about five hundred pounds for each pound of dry matter produced. In arid countries, where the atmosphere is drier and the sunshine more abundant, as high as seven hundred and fifty or even one thousand pounds of water are consumed for the production of one pound of dry substance. When drought sets in, it simply means that the supply of water in the soil is not sufficient to maintain the flow of water through the plant until the plant has reached maturity. While it is possible by plowing and proper soil tillage to enable water to soak into the soil easily, and by proper methods, to prevent water from evaporating from the soil surface, up to the present no easily available method has been known for the regulating of the flow of water through plants.

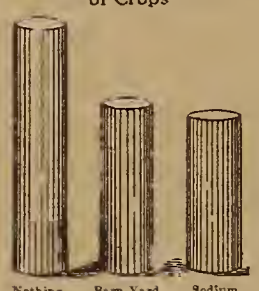
### Little Plant-Food in Spring-Water or Rain

A number of experiments have recently led to the belief that it may be possible to diminish the amount of water that must be passed through a plant to produce a pound of plant substance. For instance, Woodward, working in 1699, grew plants in rain-water, in spring-water and in the notoriously impure water of the River Thames. He found that more dry substance was produced for equal amounts of water passed through the plant in the vessel containing water from the River Thames than in the vessels filled with spring or rain water. That is, in dirty water, plants were able to produce dry matter with a smaller amount of water than in approximately pure water. It must be remembered that the dirt in the water of the River Thames is in reality plant-food, and that rain and spring water are almost entirely devoid of the mineral elements of plant-foods—the substances that the plants take from soil.

### Well-Fed Plants Require Less Water Than Those Poorly Nourished

Over one hundred and fifty years passed without much thought being given to this subject, but soon after 1850 several German investigators grew plants on soils that had received various applications of commercial fertilizers. It was found that in almost every case soils that had been liberally treated with plant-food produced the largest amount of dry substance with the least amount of water. At the famous Rothamsted Experiment Station in England it was repeatedly observed in years of drought that well-fertilized fields yielded well, while on infertile fields there was practically no crop yield.

Effect of Plant-Food on Water Requirements of Crops




About fifteen years ago a Frenchman working with fescue grass found that on a poor soil it required 1,109 pounds of water to produce one pound of dry matter, while on a rich calcareous soil only 574 pounds were required. A few years later the Bureau of Soils of the United States Department of Agriculture hit upon very much the same law. Some ten years ago the Utah Experiment Station undertook a series of investigations dealing with the amount of water required under various conditions for the production of one pound of dry matter and some rather startling results were obtained.

For instance, on a naturally fertile soil, 908 pounds of water passed through the plants for each pound of dry matter produced. By adding to this soil an ordinary dressing of manure this was reduced to 613 pounds, and by adding a small amount of sodium nitrate it was reduced to 585 pounds. This, of course, is a tremendous reduction which, in years of drought, would undoubtedly mean the difference between crop success and crop failure.

It was further found that not only is the fertility of the soil important in determining the water cost of dry matter, but that the nature of the soil and treatment given to the soil are equally important. Thus, in a series of experiments the following results were obtained: On a sandy loam, not cultivated, 603 pounds of water were consumed to produce one pound of dry matter; on the same soil, cultivated, only 252 pounds were required. On a clay loam, not cultivated, 535 pounds of water were consumed for each pound of dry matter; whereas, on the cultivated soil only 428 pounds were necessary. On a clay soil, not cultivated, 753 pounds of water were transpired, while on the cultivated soil only 582 pounds were used. This shows that the farmer who faithfully cultivates and stirs the soil throughout the summer and after every rain has the satisfaction of knowing that he is accomplishing two very important things: He keeps the moisture in the soil—that is, prevents evaporation from the surface of the soil—and also makes it possible for good crops to be grown with much less water than would otherwise be required.

Breathing Pores or Stomata, on Leaves. (Greatly Magnified)

### The Beneficial Results of Fallowing

Similar results were obtained under a system of fallowing. The fertile condition of the soil induced by resting the soil makes it possible to produce dry matter with a smaller amount of water than can be done on soils that are cropped continuously.

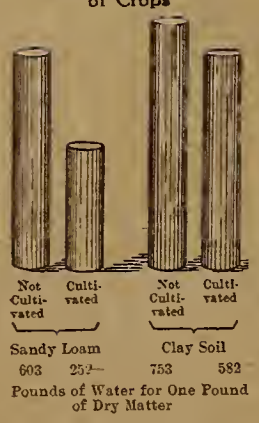
The meaning of all these results seems clearly to be that the more available fertility a soil contains, the less water will be required by plants growing on such soils to produce one pound of dry matter. Whether the fertility is caused by the addition of fertilizers, or by proper plowing in fall or spring, or by persistent and proper hoeing throughout the season, or by occasional resting of the land, the effect is the same—fertility is either added to or set free in the soil, and the water cost of the crop is thereby reduced. In seasons of drought this principle becomes of greatest importance, for usually in such seasons the only water that the plant has at its disposal is the water stored in the soil, and the more economically such water is used, the longer will it last and the greater the certainty of obtaining a satisfactory yield.

### A Fertile Soil is the Best Instrument for Fighting Drought

During the season of drought the fertile soil has every advantage, for through the plants growing on such a soil a very small stream of water is passing; whereas, through the plants on infertile soils large quantities of water are being wasted into the air. However, in ordinary seasons this principle is also of importance, for on a fertile soil the water stored from winter or that falls in summer will produce much larger yields than on an infertile soil.

Just why soil fertility should have this effect is not clearly understood. The fertility of the soil is dissolved in the water clinging around the soil grains. The more fertile the soil is, the stronger or richer this solution is. A fertile soil has a strong solution of soil water; an infertile one a weak solution. Some writers have compared these solutions to thin and thick soup—that is, a man making his meal on soup will eat a smaller quantity if the soup is thick than if it is thin. There may be some truth in this explanation, but undoubtedly other causes are largely responsible for the variations.

Effect of Cultivation on Water Requirements of Crops




Meanwhile, in this principle, that consumption of water by plants decreases as the fertility of the soil increases, the farmers of the East and the West, of arid and humid regions, *have a powerful instrument in fighting drought* and in making the best use of the water in agricultural soils. In fact, in the light of this principle the importance of maintaining soils in the most fertile condition is emphasized as never before.

The resourceful farmer who by cultural methods, by manure or by other devices, manages to keep his soil in a fertile condition is the man who ultimately will reap the largest rewards from his efforts.

# Horsemanship as a Farm Asset

## Handling Headstrong Horseflesh as an Art for All—By David Buffum

Some time ago in my series of papers on horses and horsemanship, I told the readers of Farm and Fireside how such things as kicking, running away, balking and other vices could be cured. The methods that I prescribed were not only scientific, but practical, being based upon the nature of the horse and the way in which his mind operates, and all of them were methods which I myself have used again and again in the subjection of vicious and unruly horses.

While some very gratifying letters have come to me from readers who have derived benefit from them, there are always some to whom such articles appeal only as showing interesting traits in animal nature, and interesting feats done by other men. And so the question comes into my mind, to how many of my readers have these articles really proved helpful and not merely entertaining to read? To how many have they been an actual means of assistance in making dangerous horses safe, in promoting comfort and pleasure when driving, and actually adding to farm assets by making apparently worthless animals valuable?

### Power Comes With Practice

There is an idea, far too prevalent, that certain men possess a sort of occult power over horses—just as certain women have the power of bewitching men and making them do their bidding. Probably every grown-up male reader of Farm and Fireside has met with such sirens and some who are not grown up. But horsemanship is a different thing and no man, in his control of horses, has any power of wizardry. Assuredly, I am myself no worker of miracles; such knowledge as I have of horses is not a "natural gift," but the result of many years of experience and a great deal of study and hard work.

I do not mean to imply that some men have not a greater aptitude for it than others. But the methods that I have recommended for control and for the cure of vice can be applied by anyone who has had as much experience with horses as falls to the lot of the ordinary farmer and his success will be in pretty direct ratio to the earnestness and diligence he brings to the task.

Is this worth his while? Does it pay to bestow time and study and effort upon such matters? Be assured that it does. Anything that makes good horses out of bad ones and promotes the safety and comfort of the thousands who use them pays, to say nothing of the humanitarian side of the question as applied to the horse himself, for no surly, vicious horse is happy while he remains so.

But how about the strictly financial aspect of the question—for however we may seek to idealize it, farming is not a matter of sentiment, but a business that must be made to pay a profit, and most farmers read the agricultural papers to learn how to make their farms pay them better.

Does horsemanship pay in this sense? It pays well. Out of the whole number of horses, there are a great many bad ones, horses that have tricks and vices that render them of little value either in the market or on the farm, and there is probably no one thing in farming that pays larger dividends than the ability to take such horses and convert them into good ones. This transformation often multiplies the value of a horse several times over.

### Independent Equine Gentlemen

I can perhaps make this fact a little clearer by citing a few instances from my own experience. We have at the present time on the farm a pair of geldings, aged respectively eight and nine years, that I bought last year. They are young, sound and handsome, good workers and drivers and entirely gentle for women or even children to use. As horses are now selling, their market value is about seven hundred dollars. We bought them for just three hundred dollars. Why could we buy them so cheap? Simply because they were both confirmed balkers; one of them had also a cheerful and highly ingenious way of breaking the pole in two whenever things did not go just to his liking (which was pretty often), and the other would occasionally, though not often, kick in harness, the kicking never being especially vicious, but evidently intended as a warning that you must never touch him with the whip.

This pair of exceedingly independent equine gentlemen were given some long-needed treatment the first morning they spent on the farm, and during the whole of the afternoon they worked, not very cheerfully, it is true, but without really daring to stop and meanwhile they were chewing the cud of the astounding discovery that they did not own the earth and could not after all do just as they pleased. During that first lesson in obedience the pole-breaker got in his fine work and smashed a pole that one would hardly have supposed an elephant could break and the other kicked in the forward part of the wagon; but they found that these trifles did not terminate their lesson. The following day they worked nicely all day, accepting both work and discipline just as a matter of course. Then a few days of unavoidable idleness restored their self-confidence a little and made a second lesson necessary. Since that time they have given us no trouble whatever and have worked nicely in single and double harness, as nice a pair of farm horses as one could wish to have. Now, did horsemanship in this case pay? Was not money saved in buying a seven-hundred-dollar pair of horses for less than half price worth while?

Seven Years a Runaway, Now Safe and Steady

Many years ago I quite accidentally ran across a chestnut thoroughbred mare in a large sale stable where, as a rule, only heavy draft horses were sold. The dealer knew nothing of her breeding, but no one familiar with well-bred horses could doubt for a moment that she was either thoroughbred or so near it as to be so to all intents and purposes. The dealer told me that he took her in trade and would sell her very low, one hundred and fifty dollars being his price. I examined her teeth. She was beyond the age at which her years could be definitely told, but I guessed her to be in her early teens. She was perfectly sound, with beautiful clean limbs, as free from blemish as on the day she was foaled.

On my asking the dealer if she was kind in harness he said, "Kind as a kitten; any woman or child can drive her," but when I wanted to see him drive her, he said he had no harness that would fit her, all his rigging being calculated for large, heavy horses. I was sure, from this, that he lied about the mare being gentle, so I offered him seventy-five dollars—just half his price—and after a little hesitation he accepted it.

### Managing Minnie

When I got the mare home and hooked her up I found that she was not broken to harness at all. She did everything that was ill-mannered and unworthy of a lady of her breeding—kicked, balked, struck at me with her forefeet and even threw herself down on the ground. And yet the quiet way in which she stood while being harnessed and her evident familiarity with the operation, made me feel sure that someone had tried to break her and had not succeeded.

A few days later a young man, the son of a recently-deceased millionaire in a neighboring city, was looking over my horses and on seeing this mare he exclaimed, "Why, there's Minnie!" He then explained to me that Minnie had been purchased by his father some ten years before for fifteen hundred dollars. She was a daughter of Lexington and according to record was now fourteen years old. His father had valued her so highly that he never had her broken, but used her only as a brood mare, and as she had several times failed to get in foal, she had produced only a very few foals. On her owner's death, his widow, who took little interest in her husband's farm and none in his horses, ordered the foreman to break her to harness and trade her off for a draft horse. The first part of this program, after efforts resulting in three wrecked vehicles, the complete loss of his own nerve and the absolute spoiling of the mare's disposition, he was constrained to give up; the second part, requiring less skill and no nerve (the latter being supplied wholly by the dealer) he carried out—and thus the mare came into my hands.

It took a great deal more time and skill and patience to get this mare nicely broken than would have been needed had she been young and unspoiled—for she not only had everything to learn, but a great many things to forget. But, once broken, she was a treasure. Again, did horsemanship pay? This question is best answered by the fact that for fully ten years she was my favorite of all my horses and during the whole of that time she was never sick and never lame. As a buggy horse she was almost ideal. On long distances she seemed absolutely tireless; she was exceedingly gentle and intelligent and I never knew her to shy or evince the slightest fear of anything along the road—a rather remarkable thing when we consider that she had spent her whole life in pasture and stable before she came to me. In her old age I bred her and raised two fine colts. And all that she cost me was seventy-five dollars—plus the trouble of breaking.

Mr. Buffum Driving the Balkers Mentioned in His Article

### From Nervousness to Vice

One of the best instances that I ever knew of the money value of horsemanship was furnished by a filly that was raised by one of my neighbors. She was trotting-bred, large, remarkably handsome and though not a really fast mare, she had some speed. My neighbor was not much of a horseman and was also too busy to have much time for driving. Accordingly the mare stood far too much in the stable, eating the bread of idleness until one day when she was being driven, her nervous system overwrought by stimulating feed and no opportunity to work it off, some trifling accident started her to kicking. Her owner, new to the situation and much alarmed, threw down the reins and jumped out, and a bad runaway and smash-up ensued. The mare, thereafter, would begin to kick and run the moment she was hooked up, and continued till she was clean of everything, and having thus learned what she could do in harness, she became bad in the stable and would kick and bite dangerously when being cleaned or even when led to water.

Her owner next sent her to a certain breaker to be cured of the vices she had contracted. The breaker was naturally a good man with horses and he had been fairly successful; but he knew nothing of horsemanship as a science and had also dealt almost wholly with cold-blooded stock. Therefore, this warm-blooded filly, who fought like a fiend and had a lot of nervous energy and will-power to back her efforts, was a surprise to him. He made an honest effort to conquer her, but she always got the best of him.

At the time of these occurrences I had a large number of colts of my own, and I was not, and never have been since, in the business of breaking colts for other people. Her owner came to me, however, and begged that I would make an exception in his case. At first I refused; but the case was an interesting one and the sum that he was willing to pay was so large that I finally consented.

### Making Over a Worthless Animal

I have given this account of the filly and the vices she had contracted to show how utterly worthless, as far as market value was concerned, she had become. Of the details of breaking her I need say little beyond the fact that she fought rather harder than usual when we first applied treatment and kept up her resistance longer. She also seemed to require a greater number of lessons in general subjection before she was fit to harness. But there was no special difficulty in breaking her. She was a splendid roadster and I drove her pretty constantly for about six months; then, as winter was coming on, I returned her to her owner, telling him she was kind and gentle in every way, though "plenty of horse." I did not tell him she was safe for women and children to drive. Nevertheless, he sold her shortly after for eight hundred dollars to a man who wanted a family horse and from that time on she was very often driven by women and children. She was owned by this man as long as she lived and was always perfectly reliable.

In this case the profit of reforming the mare is conspicuously evident for she was utterly valueless before and could not be sold at any price. I charged her owner, it is true, a pretty stiff price for handling her, for I did not want outside colts to break and did not want to encourage their owners to bring them to me; but this only shows that his profit would have been still greater if he had done the work himself.

Now, I want my readers to distinctly understand that I am not advising them to buy vicious horses to cure them of their vices and then sell them at an advanced price, as a business. It is not in such a business that the value of good horsemanship chiefly lies. Its greatest value is found in the fact that the percentage of horses having serious vices is sufficiently large to affect all who are dependent upon horse labor either for pleasure or profit, and you may be sure that sooner or later some of these bad ones will come to you. In such emergencies, the ability to deal successfully with the matter with which you are confronted will often save heavy losses and on almost any farm will yield substantial dividends in money as well as comfort and safety. And if looked at in a broad way, the gain is still greater, as the loss occasioned by such animals is rarely confined to a single individual or even a single score of individuals. For the vicious horse is peddled from owner to owner, always unhappy himself, never benefiting any and often the direct cause of dishonesty

I have not said much about the latter matter; but you may be sure if many vicious horses come into your hands and you do not know how to cure them, that your desire to pass them along to some other fellow will be very strong indeed and you will find yourself on pretty ticklish ground concerning the Scriptural injunction, "Lie not one to another."

Loading carriers with asphalt at Trinidad Lake

# Genasco

**the Trinidad-Lake-Asphalt Roofing**

Consider Genasco from the three vital standpoints:

1. **What it does**
2. **What it costs**
3. **What it saves**

1. Genasco waterproofs your roof to last. Trinidad Lake Asphalt, used in making Genasco, is Nature's everlasting waterproofer that has resisted the influences of weather-changes for centuries. It carries into Genasco these same weather-resisting qualities, and makes it defy rain, snow, wind, sun, cold, and heat; and it makes it *permanently* waterproof.

2. Genasco costs about the same in the beginning as the socalled "asphalt composition" or the "special process" roofings which would be wonderfully good imitations of Genasco if they didn't crack, break, and go to pieces. But they can't stand the real test—the weather. They haven't the lasting life which *natural* asphalt gives.

Genasco is economical because it resists and lasts.

3. The saving in Genasco Roofing is plain. You do away with leaky roofs and the expense of repairing them; you prevent costly damage to rooms and furniture, and you save the cost of re-roofing. Genasco first-cost is last-cost.

Get Genasco Roofing—either mineral or smooth surface. Guaranteed, of course.

The **Kant-leak Kleet** for roofing-seams prevents nail-leaks, does away with dauby cement, and gives a fine finish to the roof.

Ask your dealer for Genasco with Kant-leak Kleets packed in the roll. Write us for samples and the Good Roof Guide Book.

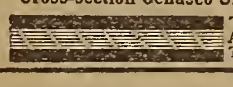
**The Barber Asphalt Paving Company**

Largest producers of asphalt, and largest manufacturers of ready roofing in the world.

**Philadelphia**

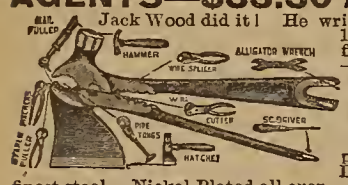
New York San Francisco Chicago

**Cross-section Genasco Smooth-surface Roofing**






**AGENTS—$33.30 A WEEK**




Jack Wood did it! He writes—"Hurry up 100 more—sold first lot in 2 days—best seller I ever saw." **Hundreds of agents coining money**—$5.60 worth of tools for the price of one. Drop forged from finest steel. Nickel Plated all over. **Astonishing low price to agents**—1,200 ordered by one man. Write at once. Don't delay. Experience unnecessary. Sample free. **THOMAS MFG. CO., 2146 Wayne St., DAYTON, OHIO**

**Your Buildings Are Capital**

—just as much as your land. You wouldn't think of letting your land run down. Do you neglect your buildings?

Where the paint has scaled off, the weather will soon work ruin.

This spring protect your buildings with good paint. Be sure your painter uses

**"Dutch Boy Painter" White Lead**

and genuine linseed oil. You can find nothing so protective, lasting and economical. Ask your painter.

You can have *free* our "Helps No. 747," which tell all you want to know about paint and painting.

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New York Cleveland Chicago
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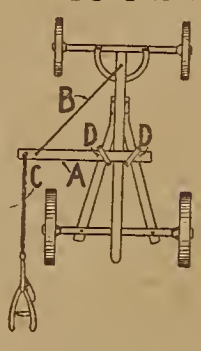
# The Headwork Shop

## A Page of Concentrated American Ingenuity

### Hard Job Made Easy

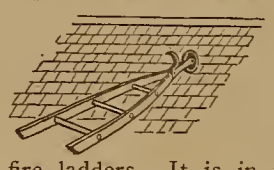
To grease a heavy or loaded wagon alone and without a jack, take a two-by-four the right length and set one end under one of the spokes, about equal distance between hub and rim, the other end resting on the ground, on the inside of the wheel. Now take hold of the spoke opposite and lift. The two-by-four set at the proper angle will slide the wheel off sufficiently for greasing. To put wheel on again, set two-by-four on outside. THEODORE STOA.

### To Plow Around Trees




Make the task of plowing around trees simple and easy by rigging up the contrivance shown in sketch. To the trucks of an ordinary farm wagon a two-by-six (A) of stout wood is fastened by clamps (DD) of sufficient strength to stand the strain. B is a rod or chain of length suited to brace A. C is a chain attached to the plow. The idea is to plow three or four furrows on each side of trees and then finish up as usual. By shifting the two-by-six, plowing may be done on either side of the wagon. The plowed ground can be harrowed by the same contrivance, using a harrow instead of a plow. J. K. PFLEIGER.

### A "Get There" Fire Ladder



A safe and practical fire ladder is shown in the sketch. It is quickly and easily put in position, something very desirable in fire ladders. It is in the form of a fruit ladder at the top, with a small wheel at the end, thus enabling one to push it up over a roof without catching on the shingles.

A hook is placed in the position shown, so that when the ladder is pushed up to the ridge of the roof it can be turned over and the hook will hold it firmly in place. Make the ladder long enough for any roof you have and have another that will reach any roof edge. MRS. M. C. ROBINSON.

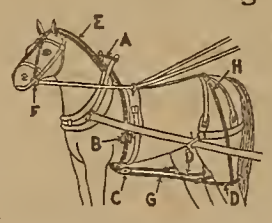
### Can Drink, But Not Wallow

Prevent hogs from wallowing in their drinking-trough in warm weather by taking large smooth wire (the heaviest telephone wire will do), fasten firmly at one end of trough and wrap around and around making wires from five to eight inches apart where they cross the open part, according to size of hogs. Fasten firmly at the end and you have the hogs shut out, except for drinking. This is better than nailing slats across, as they soon get rooted off, as well as being hard to clean. C. B. KING.

### Rapid-Potato-Coverer

I submit the following plan of a potato-coverer. It should be made out of one-by-six stout oak or elm boards. The side pieces are four feet long and two and one half feet apart in front, and about eight inches apart behind. Bore two holes in front, to which the singletree is attached by means of wires. Two old cultivator handles are attached behind. Drive the horse down the middle of the row and the coverer does the work ten times as fast as a hoe. HERBERT TOOPS.

### Anti-Kicking Attachment



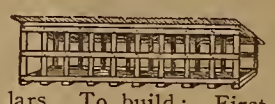

The equipment shown in the illustration consists of a strap (E) eight to twelve feet in length, depending on the size of the horse. It should be made as strong as an ordinary buggy trace. This strap goes from the bit over the head, like an overcheck, back between the hames and down under the hame tug in front of the back-pad so that it will come back on the outside of the belly-band when pulled.

It goes under the horse and returns on the other side in a similar manner to the opposite ring of bit. An extra hame-strap (A) is used to keep the two straps between the hames. B is a buckle to lengthen or shorten strap. C is a pulley large enough to admit a one-half-inch hard twisted rope (G) which works from the hopples (D) on the right leg, back and out through the pulley to the hopple on the left leg. H is a strap going over hips, to support the hopples. With this harness the horse can walk and trot with ease, but cannot kick or gallop, as every time he tries, his head is pulled up by the attachment.

Simply hitch him up to a buggy or plow or harrow and drive him as any ordinary horse and it breaks the horse of his kicking while you drive or work him.

I have worked and driven horses with this harness that I would not attempt to handle alone with any device I have ever seen. W. E. RAMSEY.

### Corn-Crib From Fence Wire



This crib will hold twelve hundred bushels and costs sixteen dollars. To build: First I laid old cross-ties on the ground four feet apart. On these I nailed the floor, leaving cracks of one inch. The front posts are eight-foot cross-ties; the rear ones are seven-foot fence-posts. I nailed six-inch boards at bottom, middle and at top of posts, thus making the correct distance for the thirty-six diamond-mesh field fencing with which I inclosed the crib, using ordinary fence staples at the post, and small staples between. I braced the crib at each end with boards. The roof is corrugated iron. The diagram shows the framework, which is seven and one half by forty-eight feet on the ground. D. CONGER.

### The Latest in Calf-Feeding

If the calf does not learn to drink readily, just nail or screw a short piece of leather strap in the bottom of a wooden pail like illustration and the calf will quickly take hold of the strap and suck the milk out nicely, which is better for the calf than to gulp it down F. E. BARNEY.

### Water for the Wash-Room

Take a vinegar-barrel and set under the eave trough on a stand three feet or more above the wash-room floor. Bore a hole in lower end of barrel and one through the walls of the wash-house. Run piping from barrel to wash-house and put a faucet inside. This is handy on wash-day for those that have no cistern. MRS. W. D. BOND.

### Canvas-Glove Luxury

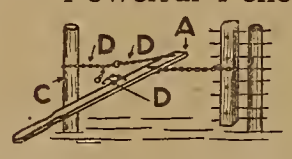
Few persons who wear canvas gloves know how much more comfort they can realize by stitching a piece of elastic about two and one half inches long on the back of each new glove. Stitch only on the ends of the elastic and attach to glove on the back, just above the wristband, stretching the elastic the full width of the glove. It takes up the fullness which is in most gloves in the back, keeps them fitting snugger on the fingers, and feels so much better than the untreated glove, which is usually half-way off one's fingers. P. R. STRAIN.

### Tie to Concrete

Dig a post-hole three and one half feet deep. Into this set a stove-pipe four sections in length. Fill around with earth to hold steady. Fill pipe with concrete-mixture of one part of cement, two parts of clean sand and four parts of gravel. Use no stone over one and one half inches in diameter. The mixture should be soft enough to pour from a pail.

Drive a small gas-pipe (A) with the ring on the end of it into the concrete. When dry, remove stove-pipe with pincers. This post is ornamental as well as very strong. It will not rot and a horse will not gnaw it. BERNARD F. DALZELL.

### Powerful Fence-Stretcher



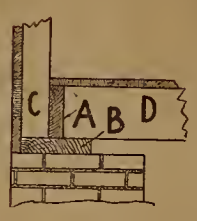

If you have woven wire to stretch, make the following device. Clamp two two-by-fours on the fence with eight bolts. Use a rough piece of oak, eight feet long, for a lever (A), bore three holes in it six inches apart and put a plow clevis in each.

From the middle clevis run a chain around the two-by-fours, also fasten a chain around post (C). Take three chains (DDD) and hook them together as shown by sketch. By working the lever and each time hooking one of the lever chains farther up on the chain attached to the post, two men can put on enough force to break an ordinary woven-wire fence. J. P. SOARES.

### A Good Hammer-Handle

I have found that an old buggy-spoke makes a good hammer-handle. It is smooth and tough and requires but little work to fit it. W. KIRK.

### That Mouse-Proof House




The mouse-proof house described in the December 25th issue is good, but when building a new house here is a still better method, known as the box sill:

A two-by-ten, to which has previously been spiked an upright piece (A), is laid down on the wall as at B. This (A) must be the same width as the floor joists and spiked in the center of B, leaving B to extend four inches on either side. On the outer side, the studding (C) is placed and on the other the joists (D). This not only guards against mice and rats, but wind and drafts as well. It is easy to lay floors, as you have no studding to cut around. W. R. KENNEDY.

### A Poultry-Catcher

I have found the following simple device very handy and effective around the poultry-yards. Make a hook of number eight or nine wire about four inches long with opening of one half inch, with point turned out slightly. With fine wire fasten this tightly to the end of a light stick five feet long. When you want to catch a chicken or other fowl, simply throw out a little corn and you can hook this on the leg. W. C. HICKS.

### Roping the Fodder

This is a quick and easy way to unload fodder or any kind of roughage from a flat rack or sled. Tie a long, stout rope on back end of rack, lay it on rack up to front end then load up with the rope on rack under load. When you arrive at the place you want to unload the fodder, take rope back over load and tie to anything solid, then drive team ahead. This will roll the fodder off and leave it almost the same as it was when on the rack, only upside down. This kink works as well on a sled as it will on a hay-rack; try it. JESSE RAHN.

### Non-Crowding Roosts

Where many chickens roost together, crowding one another off the roosts is generally the result. Roosts arranged as illustrated will avoid this trouble. Bore holes in the roosts three feet apart, or less if desired. Drive into these pegs one foot high and about the size of broom-handles. If roosts do not run full width of coop, pegs should be placed at ends. FRED L. BAILEY.

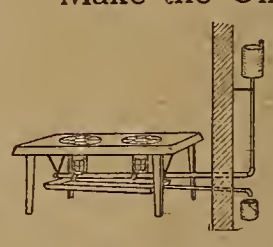
### To Catch Mr. Hawk

Get a steel-trap and two pieces of rails. Place the rails in the shape of the letter V, put a dead chicken in the corner at point marked with letter C, and set the trap close to the chicken at T, covering the trap with leaves or grass. Since a hawk will not stand up on anything and reach down to get the chicken, he will walk around between the rails and come into the trap before he knows it. J. L. ROBINSON.

### To Lengthen a Pail's Life

Nearly all large metal pails wear out first at the rim where the ends of wire running around are joined. To repair, simply take a piece of tin about three inches square, bend it together across the middle and fit it snugly over the break on the rim. Then take a nail or sharp punch and make two or three holes through the folded tin and pail, insert rivets and clinch. The pail will still last a long time. R. C. SHAW.

### Make the Oil-Stove Safe



This scheme removes all danger from filling the oil-stove tank while stove is burning or when burner goes out and oil keeps running. Extend feed pipe outside of the house, so that the tank is out of doors and away from the stove.

Put a long shallow pan under the burners and connect with a three eighths or quarter inch pipe running outside of house. Give plenty of fall to pan and pipe. W. C. HOWDLE.

### Headwork Awards March 10th

B. F. Wampler, - - - - - - Catching Rabbits by Wholesale
Wm. Bond, - - - A Home-Made Anvil
M. E. Kent, - - Saves Steps and Temper

### "The Best Tool I Use"

Beginning with the May 10th issue, the Headwork Shop will go into temporary eclipse, long enough to make room, in a few issues, for a page of letters on favorite tools. This brand new department has been made possible by the enthusiastic response made by readers to our call for contributions on the subject "The Best Tool I Use" in the issue of February 25th.

The "Best Tool" page will contain descriptions and illustrations of many kinds of tools for doing widely different things, together with the writers' reasons for their faith. Since no particular tool is the best for every occasion, special prizes will not be awarded, but contributions used will be paid for at the end of month in which they are published.

At a later date, the Headwork Shop will be resumed—better and brighter than ever. Watch this space for further announcements.

# Farm Notes

## Wanted—Parcels Post

"THE attorney-general of Iowa has found that one express company has made over nine hundred per cent. on its investment in Iowa," says a prominent farm paper of that state.

This is a great inducement for the express companies to fight parcels post in Congress. Our rate in the United States for carrying is sixty-four times that of the German rate. Just think of it, Canada is as wide as the United States and more sparsely settled. Canada did charge at one time one half cent a pound, but, finding this rate too high, cut it in half to the present rate of one quarter of a cent a pound. They had a surplus of $809,237.50 for the fiscal year ending in 1909.

The United States Post-Office Department had a deficiency. Why so? They charge such a high rate for carrying packages that the express companies get all the short-distance parcels and the Post-Office Department the long-distance and unprofitable business. Packages by parcels post would come to our door instead of our going to an express office to get the goods.

A package going from here to England is delivered cheaper by parcels post than here at home. We can get parcels post and must do so. The writer has a plan he has tried out with success. I have printed on all the letters and postal-cards I send out, "Wanted—Parcels Post," on the upper left-hand corner. When I write to seed-houses and others for catalogues, or on business, they state in return something to this effect, "Your scheme is O. K. We surely want parcels post. If every person wanting parcels post would follow your request every time they do any corresponding, there would be millions of precise commands for it. We note your request and will use the same method to get parcels post." Help us to make this idea contagious. F. W. CULBERTSON.

## Rotation, But Not Restoration

"I ROTATE my crops and yet my land is getting poorer." This is a frequent statement by farmers here in Indiana and probably in other states. But let us see how many of these rotations are carried on.

In the spring he plants his corn, raises a fair crop, sells the grain and burns the stalks. The next spring he sows oats and clover—and cuts the clover twice. The third year, he turns the clover under and sows wheat. What has he taken from the soil? Three crops—corn, oats and hay. What has he returned to the soil? Absolutely nothing. And yet this is rotation for restoring fertility.

Burning corn-stalks is a common practice in our locality. From our window we can look out over thirty-six square miles of as fine river-bottom land as is to be found. Every spring the sky is lighted half the night by burning corn-stalks. Why do these farmers do this when ninety per cent. of the organic matter in those stalks is given back to the air to be borne away?

A neighbor had forty acres of big English clover to plow under for corn. It grew so rank and the fall proved so dry that the difficulty of plowing it under was too great, so he fired the field and burned up the clover. Was that all? No, he sent into the air a season's store of fertilizing matter gathered from that forty acres, which if turned under would have been of untold value to the land. He robbed his soil and got nothing in return.

In contrast with this we give another incident of another farmer who had a large sandy farm. It had been exhausted of fertility for a number of years. He bought it cheap. His first aim was to restore the soil. He sowed vetch and when that vetch was nearly up to the horses' backs he went in with a disk plow drawn by three horses and turned it under. Neighbors wondered why he did this. They said his sand ridge was already too dry, and would burn out because of the "trash" beneath. But he raised seventy-five bushels of corn to the acre on that sandy field that formerly yielded twenty to thirty bushels. This man didn't depend on his neighbors for his farming schedule.

The proper thing to do is to grow legumes or rye and turn the entire crop under—not cut nor pasture a particle of it. Rye sown in the corn, after it is laid by, will make a growth by the following May to equal tons of material. This with the stalks turned under will increase the productive power of the land one hundred per cent. But if the rye and stalks are pastured bare what is gained? Nothing. What is lost? All that fertility. Let our farmers get to thinking, and not only thinking, but acting along these lines.

When this is done, worn-out lands will cease to be, and the soils will yield bountiful harvests, as it was designed they should by the Creator. J. H. HAYNES.

## The Money Value of Improvements

I SAW a beautiful little farm and home last winter which serves to illustrate a lesson. A certain young man, recently married to a sensible girl, came into possession of a little farm of fifty acres. It was a run-down farm. The fences were dilapidated and grown up with bushes and briers, making rows a rod wide. Several rotten stumps were still in the fields. Two swampy places, requiring twenty rods of drain, were unsightly. The barn lacked many boards and the roof leaked. Rubbish heaps and worn-out farm tools and vehicles were piled around. The front yard was the most neglected spot of all. Through its weeds you approached the unpainted and unporched house.

This place was appraised at thirteen hundred dollars when it came into the possession of the young man. I wish you could see it to-day after five years' work by this young couple. Every condition I have described has been remedied. Last fall they were offered three thousand dollars in cash for it and refused it. It is their home. They have made it what it is and are a part of it. What a change after feeling unfortunate in its possession the first year!

The actual money cost of the improvements was two hundred dollars, leaving fifteen hundred dollars for their own time and money and—brains. In this time they have made a good living and a little money besides. A proportionate amount cannot, of course, continue to be made, but they are now ready to make the actual farm operations pay.

This is one case. There are thousands of opportunities to be seen while driving over

Hollyhocks Are a Good Investment

the country where the same thing could be done. What is needed is the push and the know-how.

A great many farmers do not recognize the money value of these improvements to the home and farm. The average farmer has not in the past given much thought to the ethical side of farming. When once his mind is turned in that direction, he will find there is growing in himself and family an appreciation of farm-life that did not exist amidst tumble-down surroundings.

As to the house, no home is truly enjoyable without a piazza, the larger, the better. Paint is not only a necessity to good appearance, but an economical investment. A lawn carefully prepared and cared for belongs to every family on a farm.

Vines, shrubs and flowers are productive as well as decorative if one chooses wisely, and as years go by improvements may be gradually added inside as well as outside of the house, each addition making the home, the fireside and farm more beautiful.

R. P. KESTER.

Even the laziest of men can get up speed when gas is the motive power.

Plan your season's work in good season and then season your work with recreative diversion.

Sometimes a man talks to a balky horse as though it could only understand words which cannot be found in the dictionary.

Saving on axle-grease is a bad mistake. It pays to take time to grease up and avoid unnecessary hard pulling, loss of time and worn, heated spindles in buggy or wagon.

## A Way Out of a Mess

OUR wagon slid out of the road tight against a post, with four barrels of vinegar on the load. We hitched to the hind axle and pulled it back a foot. Then we got a stout pole, built a stone pile under the front axle for a fulcrum, and as two bore down on this lever, another slid flat stones under the wheel until above the level of the road. Then with the tongue turned up-hill the wagon was easily rolled back onto the road by horse-power. C. E. DAVIS.


# What Does It Cost To Operate An Automobile?

THAT depends almost entirely on the make of car you buy.

The first cost of some cars is little, and the operating, or second cost, is big.

¶ The logical and safe thing is to consider the second cost first, and the first cost last.

¶ In designing, in selecting material, in manufacturing Overland cars, we have spared no effort or expense to produce cars that will give utmost service at the least possible expense.

¶ That our policy is correct is amply proven by the unparalleled success of the Overland—the most economical car *in the world* both in first cost and second cost.

¶ There are now about one thousand Overland dealers. One of them wants the opportunity to prove to you by actual comparison and demonstration the full significance of the strong statement just made.

¶ Twenty-five thousand enthusiastic

Overland

owners will vouch for that statement in no uncertain terms. Below we reproduce one typical, unsolicited expression. We have purposely selected from the mass the letter of a physician, because, of all men, he is the one who must have an absolutely dependable, economical car for continuous service—summer and winter, day and night.

INDIANAPOLIS, IND.

OVERLAND AUTO CO., TOLEDO, OHIO.

GENTLEMEN—When I talked of buying an automobile more than a year ago there were some very important questions that no one was prepared to answer: They were concerning the upkeep of the machine. I have kept a careful tabulated account of my year's expense, and am glad to furnish you with this information.

With the exception of ten days sickness last winter, my machine has been run as a physician runs a machine in his practice scattered all over the city, besides taking many pleasure rides of evenings and some Sunday rides to adjoining country towns.

| | |
|---|---|
| My gasoline cost me for the year | $59.67 |
| Lubricating oil | 8.65 |
| Transmission grease | 2.63 |
| Anti-freeze fluid | 3.25 |
| Battery cells | 4.25 |

This makes for the year an average of 21½c. per day for actual running expenses.

Other expenses, including all supplies and mending tubes, tires, patches, etc., as well as licenses and all expenses connected with owning a machine, cost an additional 23½c. per day, making a total of 45c. per day. I have not heard of any car that compares with the Overland in economy for upkeep.

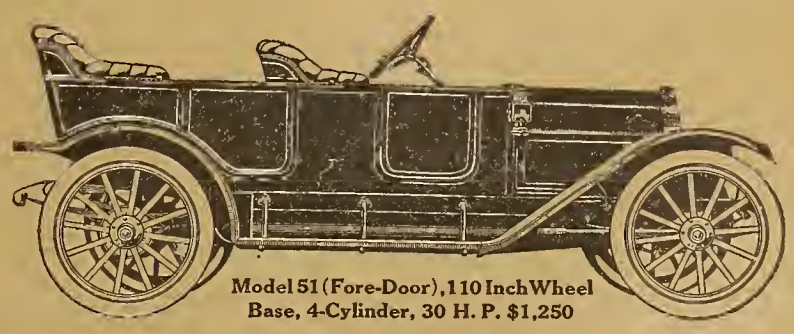
Yours for the Overland,
W. R. STEWART, M. D.

¶ It is, of course, impossible for any manufacturer to say how much it will cost an owner to operate his car. There is a wide range of difference in conditions and in drivers. The very nature of Overland manufacturing methods insures a car that must perforce be efficient, reliable and economical. We know from our own experiments and from actual experience of Overland owners that it offers the greatest automobile value when purchase price is considered and that it can be operated and maintained at less cost than any car of similar rating. We make five models, all with high duty, quiet, four cylinder motors, from 20 to 40 horse-power. There are twenty-two body styles, priced from $775 to $1675. This car shown below is model 51, with fore-doors and center control, that is to say, the shifting lever and emergency brake lever are inside the car in the center at the left of the driver. Notice on other fore-door makes the levers are outside, proving that the body is patched up with the fore-doors to meet the latest ideas. Model 51 has a thirty horse-power, four cylinder motor that is a marvel of efficiency, quietness and reliability. Dual ignition, magneto and battery, 110 in. wheel base, seats five people, tires 34x3½ in., three speeds reverse and selective. Brakes internal expanding, external contracting.

***Get in touch with the OVERLAND dealer nearest you and compare this car with others about this price. WRITE FOR CATALOG.***

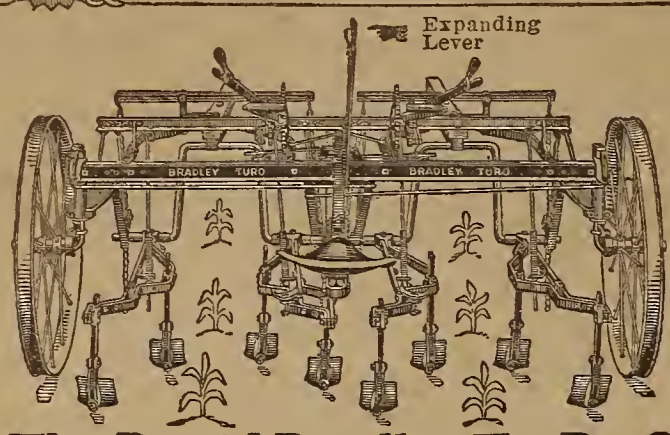
## The Willys-Overland Company

**163 Central Avenue TOLEDO, OHIO**



**Model 51 (Fore-Door), 110 Inch Wheel Base, 4-Cylinder, 30 H. P. $1,250**

# DAVID BRADLEY




Cultivates Two Rows at the Same Time.

**$41.00**

Complete with Three-Horse Hitch and Fenders.

## The David Bradley Tu-Ro Cultivator

¶ The only successful two-row cultivator made. Built to withstand the severest strain and hardest usage. Saves horse flesh, time and labor. One man or boy and three horses do the work of two single row machines.

¶ The Tu-Ro embodies the famous David Bradley patented pivot axle seat bar dodging principle. The instantaneous dodge saves almost every out of line hill, often paying for the tool in one season. Operator has a clear view of both rows at all times, with both hands free to drive.

**Pivot Axles and Seat Bar Dodging Lever;** easiest, quickest, widest dodge. Operator shifts gangs to right or left by light pressure with either foot and swaying his body in pivoted seat, without changing gait or direction of team. The only two-row cultivator suitable for hillside work.

**The Bradley Expanding Lever** regulates distance between gangs for rows of varying width. Nothing like it on any other cultivator.

**Depth Regulation Lever** for each gang and **Combined Gang Raising and Balancing Lever** that lifts all gangs at end of row without disturbing their depth adjustment.

**Short Hitch and Direct Draft;** easy on horses. Draft helps to lift gangs, also keeps shovels in ground.

**Wheels,** 42 inches high, wide tires, staggered spokes. **Bearings** dustproof and oiltight.

**Gangs** of every style for all kinds of soils; pin break, spring trip and surface or gopher blade, all interchangeable. One or more styles can be used on the same cultivator.

**Materials,** only the best of steel and malleable iron throughout; money can't make it better.

**What Tu-Ro Users Say**

R. F. D. No. 4, Box 82, Blissfield, Mich.
Sears, Roebuck and Co., Chicago, Ill.
Gentlemen:—I want to say that the David Bradley Tu-Ro Cultivator I bought of you is the best put up and most satisfactory cultivator I ever owned. No more single row cultivators for me. I hitched three horses to the Tu-Ro, one an unbroken colt, and started in to work. My boy had its operation learned in no time, and the work he did with the machine was an eye opener to my neighbors. At least twenty-five farmers have been over to see my Tu-Ro work and I think nearly every one of them will get one, too. If anyone wants to know how good a machine your Tu-Ro is, tell them to write to me.
Yours truly, A. J. SELL.

R. F. D. No. 4, Box 41, Marion, Iowa.
Sears, Roebuck and Co., Chicago, Ill.
Gentlemen.—I am well pleased with my David Bradley Tu-Ro Cultivator. I have plowed corn crossways, used it in sod, cornstalks, and for fall plowing. I can guide it with one foot and dodge every crooked hill. A neighbor saw it work and said: "That suits me," and then went over to another man plowing with a single row and told him I was doing better work. I plowed 8 acres the first half day, the first time over and it did not cover up any more than a single row. I also like it because it is close to the ground and I can always see both rows. I am advising all my neighbors to get a Tu-Ro.
Yours truly, LEWIS WEIS.

¶ Our big General Catalog shows pictures, complete description and prices of the Tu-Ro Cultivator, also David Bradley plows, harrows, planters, single row cultivators, manure spreaders, etc., the farm tools backed by eighty years of knowing how. If you have not a copy, send today for our Book of David Bradley Farm Implements.

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and you hold the moisture in the ground. Cultivate shallow or deep as the crop needs it and you release the forgotten or unknown soil properties which are needed to make the crop grow properly. We have been making farm tools for 75 years and think we have as good a line of Riding Cultivators as you need to choose from.

**IRON AGE** RIDING CULTIVATORS are long-lived machines—adjustable for rows 28 to 50 inches, while in motion—teeth adjustable for depth and angle—pivot or fixed wheel, one row or two—high or low wheels—work well on hillsides—farm close and true. A complete line. Our Anniversary Catalog will show you—also, potato machinery, garden wheel hoes and drills, etc. Address

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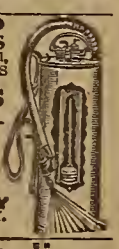

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**ALFALFA** All northern grown, guaranteed to be 99 per cent pure and free from dodder. Write for free sample.

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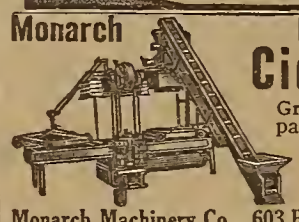

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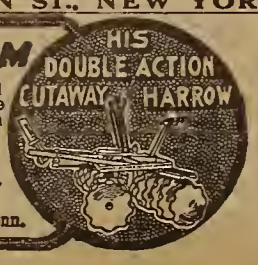
All genuine "Cutaways" are intense cultivators and will increase your crops 25 to 50 per cent. Our Double Action "Cutaway" Harrow is a wonderful invention—can be used in field or orchard. Perfect center draft. Drawn by two medium horses will move the earth twice on every trip. We can prove it. "Intensive Cultivation," our new catalogue is Free. Send for it today.




CUTAWAY HARROW CO., 854 Main St., Higganum, Conn.


# Garden and Orchard

## How to Make Concentrated Lime-Sulphur

THE use of lime-sulphur as a spray for both insects and fungus diseases is extending year by year. Even against plant diseases it proves to be more efficient in most instances than Bordeaux mixture, and better methods are being used in making it. At one time it was thought that any kind of lime could be used, but it is now known that only lime with a high percentage of calcium produces the most efficient spray material. Lime with a large amount of magnesium does not give as reliable results.

At present, one can buy the commercially-made concentrated lime-sulphur or he can make it himself without much trouble. The method worked out by Professor Stewart of the Pennsylvania State College, and published in Bulletin No. 99 of that institution, is being used by many in the preparation of an efficient and storable product. It can no doubt be made for less than six cents per gallon of the concentrated solution. When made at home, the hands can be kept busy during inclement winter weather and the lime and sulphur are the only supplies to be bought. In the commercial lime-sulphur one has to buy and pay freight and cartage on about fifty gallons of water. Water is needed, but it can usually be found at home. When made, this material is at once strained into the barrel or other container and sealed up until it is to be used. Professor Stewart has kept some for more than a year and it is still found to be in excellent condition.

A Satisfactory Cooker

On the small fruit farm a common farm feed cooker with a jacketed kettle, as shown in the first illustration, can be successfully used. In this the fire can be controlled by door and damper. If the kettle holds over seventy-five gallons it is large enough for the making of a barrel of the concentrate at one time.

Use fifty pounds of pure stone lime with nearly enough water to start slaking. As soon as the lime is slaking add one hundred pounds of sulphur. To obviate lumps the sulphur should be worked through a fine screen. Stir constantly and add water if needed to prevent too rapid slaking or burning. When all the lime has slaked, add enough water to bring it up to fifty-five or sixty gallons. Boil for about forty-five minutes or until all the sulphur has gone into solution. This can be determined by pouring out a small quantity and noting whether any fine particles can be seen in it. This may cause some trouble at first, but after one makes a few lots this part will soon be learned. In order to study each lot, a sample should be drawn off and put into an air-tight bottle and properly labeled. This may be examined and compared with other lots as they are made.

Hydrometer

Persons making this form of lime-sulphur should get a hydrometer in order to measure the density of all samples made or used. There are hydrometers, such as the one in the attached figure, which are made especially for testing lime-sulphur and which only cost about one dollar each. A sample of the solution should be cooled down to about sixty-five degrees and tested with the hydrometer. In most cases the reading will be in the vicinity of 1.24. This means that it is .24 times as heavy as water.

Farmers who have never used a hydrometer should not be scared at a Latin name. It is really nothing but the old trick of putting an egg in brine to see how strong the pickle is. If it "bobs up" the egg, it has a lot of salt in it. The spray material bobs up the hydrometer—which is merely a glass egg with a long neck to stick up and show how strongly the egg is being "bobbed up." That's all there is to a hydrometer. But you need it in making spraying material in order to be sure you are getting the proper density. One should know exactly just what strength of solution he has, either for direct application or for purposes of dilution.

The solution should be poured through a good strainer into the barrel provided for it and securely sealed until it is to be used. If a film forms on the surface it can be reheated and used again. A number of years ago the writer, while connected with the Minnesota Experiment Station, designed an anti-clog strainer which could be used to advantage in straining spray materials. It is shown in the third illustration. The lower part of the funnel is wire cloth, the top of tin. Any tinsmith can make one. For lime-sulphur solutions iron wire cloth should be used because of the action of these solutions on copper or brass. The advantage of this form of strainer is that as the heavy sediment enters

[CONCLUDED ON PAGE 9, SECOND COLUMN]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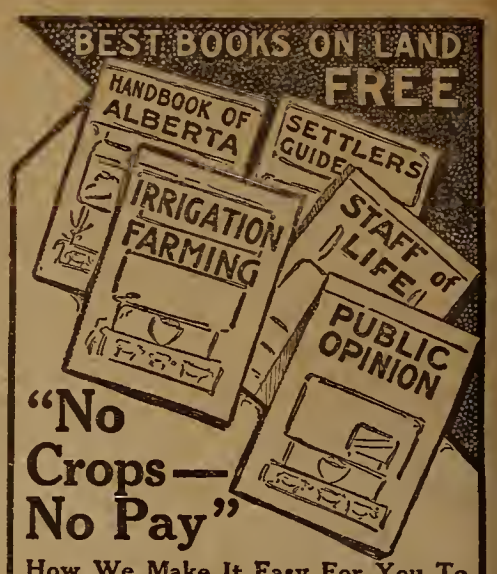


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**The Famous Valleys of Canada's Bow River and Saskatchewan River. Only Small Payment Down—Pay Balance Out Of Your Crops—"No Crops—No Pay."**

In the non-irrigated section of the Saskatchewan River Valley, in Central Alberta, we offer you a farm on a new line of the Canadian Pacific at lowest prices and easiest terms.

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**800 Bushels From 20 Acres** of wheat was the thresher's return from a Lloydminster farm in the season of 1910. Many fields in that as well as other districts yielded from 25 to 35 bushels of wheat to the acre. Other grains in proportion.

**Large Profits** are thus derived from the FREE HOMESTEAD LANDS of Western Canada.

This excellent showing causes prices to advance. Land values should double in two years' time.

Grain growing, mixed farming, cattle raising and dairying are all profitable. Free Homesteads of 160 acres are to be had in the very best districts; 160-acre pre-emptions at $3.00 per acre within certain areas. Schools and churches in every settlement, climate unexcelled, soil the richest; wood, water and building material plentiful.

For low settlers' railway rates and illustrated pamphlet, "Last Best West," and other information, write to Sup't of Immig., Ottawa, Can., or Can. Gov't Agt. (52)

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## BETTER SAFE THAN SORRY

Potatoes, tomatoes, cucumbers, cantaloupe, small fruits, orchards, can be sprayed at slight, comparative cost for protection against blight, bugs, scale, etc., with an "IRON AGE" SPRAYER. Also, actually increases the yield. The machine is adjustable, to various width rows—solution thoroughly mixed—delivered in a fine spray that covers the plant—single or double acting pumps—three, four, six or seven rows—one or two horses—55 or 100 gallon steel or wood tanks. Has orchard attachment and many others.

**IRON AGE** Farm and Garden Tools are practical, effective, economical. They give permanent satisfaction. We have been making the dependable kind for 75 years. Formulas for solutions furnished on application. Write for our free Anniversary Catalog showing potato machinery, horse hoes, cultivators and complete line of garden drills, wheel hoes, orchard tools, etc.

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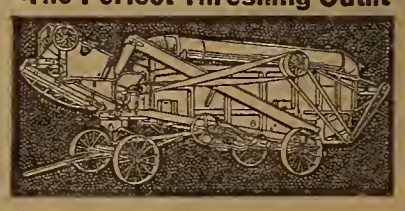
**The Perfect Threshing Outfit**



Whether you thresh your own grain only, or do contract threshing, you should investigate Farquhar Threshing Machinery. Handles wheat, oats, rye, buckwheat—any grain.

Works fast, runs easy, saves power, has fewest parts, outwears other threshers, separates clean. Three styles—20 to 40 inch. Send for catalogs of Threshing Machinery, Engines, Boilers, Saw-Mills and Road Engines.

A. B. FARQUHAR CO., Ltd., Box 516, York, Pa.

# Garden and Orchard

## Profits in Celery-Growing

LAYING out a field for celery was described by Wm. Marlink (Ottawa County, Michigan), in FARM AND FIRESIDE for January 25th. In response to numerous inquiries as to the details of celery culture, further hints from Mr. Marlink's pen are here given to growers.

In draining muck land on which to grow celery, care must be taken not to lay the cross ditches too far apart. The exact distance depends on the amount of moisture in the muck. The heavier the land the closer together the ditches must be. When the muck is exceedingly heavy, a small cross ditch ought to be made every forty paces; if very dry the land can be drained in five-acre flats.

When tile is used for drainage, the lines of tile should be laid from two and a half to four feet deep and about four rods apart. Muck land ought to be in shape to plow a week after the tile has been laid or when the excess of moisture is otherwise removed. It is broken up in much the same way as other land. The cost of draining and plowing is about thirty dollars an acre.

When the land has been put in good condition with the disk and harrow, the celery is set out. After the plants are well started —say in about two weeks' time—we make a little trench along the side of the row about two inches deep into which we throw fertilizer at the rate of a handful for every three feet. Fertilizer containing three per cent. of nitrogen or more is good for celery.

When the land has thus been put in good condition, it is easily worked and weeds can be kept down with but little difficulty. Grass will generally bother a little, but two men can handle six acres of celery and two acres of onions besides.

For keeping celery till late in the winter, it is put in trenches in the open field; six rows are generally put in one trench. Trenching is done between two boards. From eight to ten inches is left for space in which to set the celery, but care must be taken not to set it in too tight, or it will get sweaty and rot. When the celery is trenched, dirt is thrown up against the stalks fully half way, and as freezing weather approaches more dirt is added, until about even with the tops of the celery. When very severe weather comes, cover the celery up entirely, putting three to six inches of dirt on top according to how cold the climate is. This will keep the celery well.

The cost of labor from an acre of celery is about one hundred dollars from the time the land is top cleared ready to plow until the day the celery is in the car to go to market. The income from an acre ranges ordinarily from two hundred to twelve hundred and fifty dollars. On the whole season's shipping, one dollar a box is generally cleared.

For shipments from the first of November until New Year we find the most profitable varieties to be Golden Self-Blanching and Columbian. For later shipments we have Dwarf White Solid (an excellent variety) and French Success. Winter Reliance is also good. Celery ought to be put up in good shape in order to bring a fancy price.

WM. MARLINK.

## Rejuvenating the Peach-Orchard

PEACHES were a bumper crop in the East last year, and the long dry fall gave plenty of chance to harvest them for a paying market. Evidently there is not much danger that this fruit will ever fail to take well with the fruit-buying public. The latter are regaining confidence in the honesty of the peach-grower, for cases of filling the center of the basket with trash covered all around with fair specimens are getting rarer every year. This is as it should be and a great help to the seller in securing his price. As to varieties, it is now being recognized quite generally that there is little comfort either for the grower and seller or for the buyer and consumer in the first small early clings, or even semi-clings. They are a delusion and a snare, and trees of these sorts are now planted sparingly, if at all. The call is for large peaches of good quality.

Most of the peaches now put on our market are Elbertas and Early and Late Crawfords. The grower must depend on young trees for paying crops. Well-cared-for trees, three, four or five years of age (from planting) give the large and high-quality specimens, even without thinning. On older trees the fruit must be thinned. As a rule, the old trees give the undersized specimens, and often peaches with a bitterish taste, indicating a diseased condition. Whoever makes a business of growing peaches should set some new trees every year, or at least every other year, and be ready to take out the old ones when they begin to show decline and lack of health and vigor.

T. GREINER.

## How to Grow Early Radishes

RADISHES always taste the best when we have them real early. I want those that I can grow the quickest, so I stick to the little turnip-rooted ones, the Earliest Scarlet, White-Tipped Turnip, Extra Early Forcing and sorts of that kind. Any one of them will do.

Select the warmest and richest ground. Sow seed early. Sow it often, a row or two every week or ten days, as the weather permits. If one sowing fails, another will come on all right. I always keep a good supply of seed of one of these sorts on hand for this purpose. Anyone with a little foresight can have tender radishes right along.

T. GR.

## Weeds Not Wanted in Strawberries

A WASHINGTON lady reader says her strawberry-patch is weedy. So is mine, though I kept the patch clean until late last summer. It is a hard proposition to keep a strawberry-bed free from weeds when the soil is full of weed-seeds. They take advantage of the time when we cannot fight them, and grow even during late fall and winter.

If we take the precaution to mulch heavily between the rows, and lightly over the plants in early winter, then in spring put the mulch all between the rows, just leaving the plants free, the weeds may all be choked out or kept down in the covered area, and what weeds come up in the rows may be cut out with a knife or pulled out by hand. If the bed was given no mulch and the matted rows are narrow, with wide spaces between them, I try to use the cultivator and hoe between the rows and thus kill out the weeds in spring, up to blooming-time. A light mulch of some clean material, such as marsh hay or straw, placed on the cultivated area and close up to the rows of plants, will then fix things all right.

T. GR.

## *How to Make Concentrated Lime-Sulphur*

[CONTINUED FROM PAGE 8]

Anti-Clog Strainer

it collects at the bottom and all the meshes are not stopped until the entire cone is filled.

It is found that for San Jose scale a solution of 1.03 is needed. The number of dilutions necessary is determined by dividing the fraction of the concentrate (in this case .24) by the fraction .03. This gives eight, which means that one gallon of the concentrate should be added to seven gallons of water. When thus diluted, it can be used for the control of the San Jose scale on all kinds of fruit trees. An application prior to the opening of the peach buds controls the peach-leaf curl.

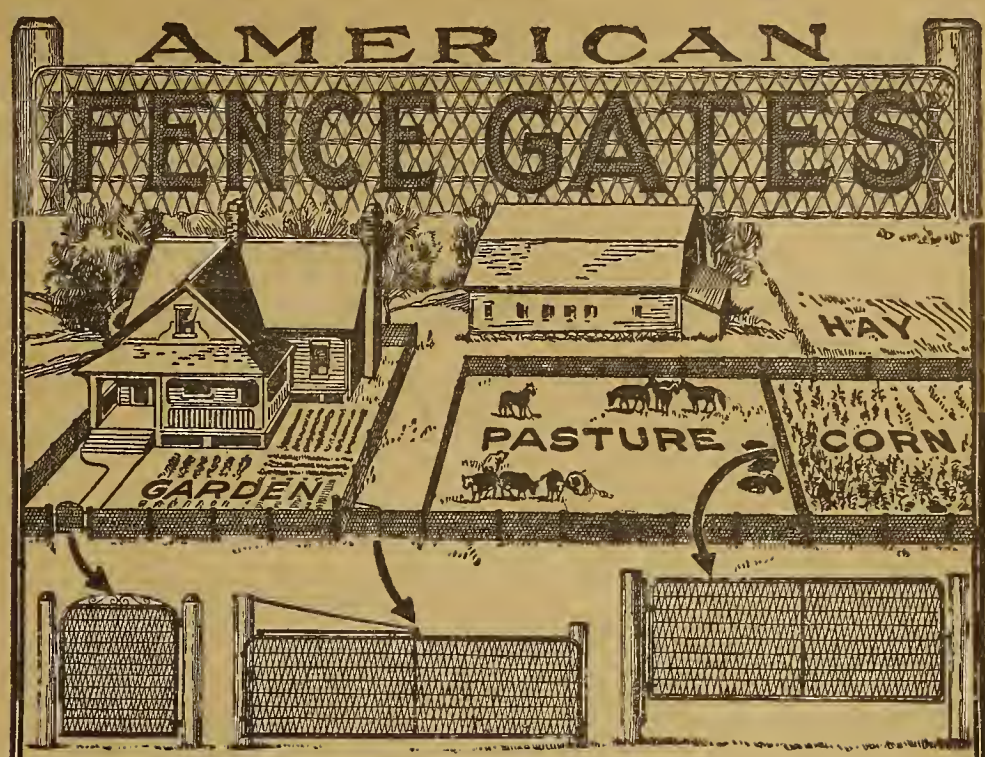
Self-boiled lime-sulphur wash is a recent discovery of Mr. Scott, of the United States Department of Agriculture. The ordinary lime-sulphur often injures peach foliage, but this modification gives us a spray effective on the peach in preventing the scab, mildew and the brown rot. It is made by putting eight pounds of good stone lime in a barrel and adding enough cold water to nearly cover it. When slaking has started eight pounds of sulphur are added. This should be stirred to prevent burning. Just as soon as any red color appears water should be added to stop further chemical changes from taking place. In this wash, it is not necessary to get the sulphur into solution, but simply to have it in suspension in the lime water. If in solution, it causes the burning of the foliage. Enough water should be added to make it up to fifty gallons. If one uses very much of this, it is better to mix it up in lots of thirty-two pounds of lime, thirty-two pounds of sulphur and two hundred gallons of water.

For the scab and brown rot of the peach, the addition of two pounds of arsenate of lead to each barrel of fifty gallons is recommended for the first two sprayings. For most varieties the first spraying should be given about the time the little fruits break out of the flower covering (calyx), the second about four weeks later and the third about a month before the fruit is to ripen. No arsenate of lead is needed in the last spraying. The arsenate of lead is added to prevent the curculio from puncturing the young fruits.

The foregoing is a brief description of the making of these two important spray materials. In the first, the clearer the brick-red solution is, after it has stood awhile, the more efficient is the wash. In the case of self-boiled lime-sulphur, the less sulphur there is in solution the better.

Spraying may be likened to painting a wooden building. When the wood is thoroughly covered, water cannot penetrate to rot the wood. Thorough spraying means that the tree, leaf or fruit must be thoroughly covered, not drenched, to prevent the disease germs from germinating and entering. In practically all cases the spray material prevents rather than cures.

R. S. MACKINTOSH.


First profit-making essential on the farm is fence; second, fence gates. Old time bars and wooden gates are inefficient and wasteful. Steel gates cost less than wooden gates—any fence dealer will demonstrate this. For driving stock from one field to another, hauling loads across field; for the economical handling of all field products proper gates are labor-saving and time-saving machinery—and labor and time are money. The plain swinging gate, the Yankee Swivel or Crane Gate, or the latest marvel of convenience and economy of action, the American Lift Gate—liberally set at different points around the fields—afford the farmer immense economy and convenience.

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**Dealers Everywhere** Stocks of American Fence and Gates are carried in every place where farm supplies are sold. Shipments are made to these points in carload lots, thereby securing the cheapest transportation, and the saving in freight thus made enables it to be sold at the lowest prices. Look for the American Fence dealer and get the substantial advantages he is enabled to offer. He is there to serve the purchaser in person, offer the variety of selection and save the buyer money in many ways.

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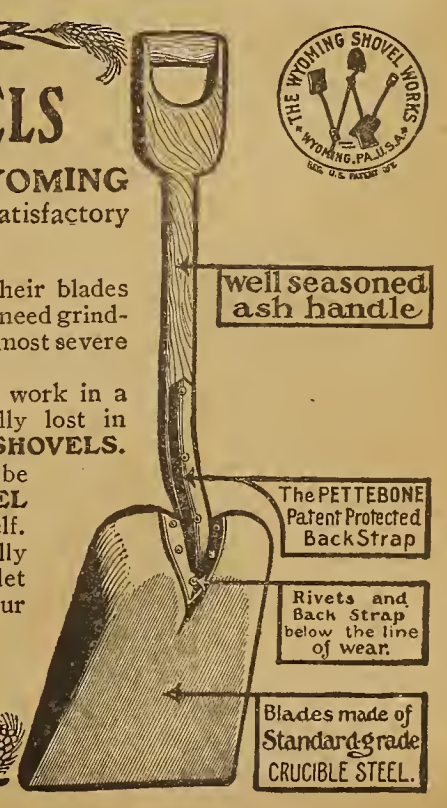
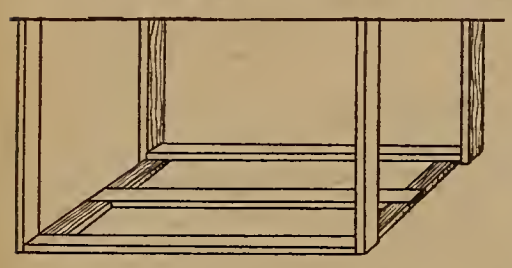


# Poultry-Raising

## Roosts and Roosting

THE location of hen-roosts is a more important matter than the novice at poultry-raising will believe. The roosts should not be high enough to permit the birds to injure their feet in descending, but to be less than three feet from the floor does not satisfy the instinct of hens to roost up as high as possible from prowling animals. If so arranged that the whole roosting structure swings clear, there is less danger of contaminating the walls of the building through lice or perch mites, which may affect the roosts.

In old hen-houses the roosts were arranged ladder-fashion, but as all the fowls tried to get on the highest roost, many poultrymen now place them on a level. If far enough apart so there is air circulation between the rows, this is satisfactory and simplifies



the construction of the roosts. A slant of the roosting-plane, of at least twenty-three degrees, with the roosts about thirteen inches apart, will give just as good results.

The roosts should be broad enough to support the birds without constant effort, on their part, to hold on. A breadth of two inches is about right. A wide dropping-board, hung beneath the roosts is indispensable to cleanliness. This may be level or it may incline so as to convey the droppings into a box which can be emptied every day—the latter plan being the best.

In either case, it is well to keep clean by dusting with ashes or land plaster. A roost that holds twenty-five fowls is hung from the rafters by four strong supports two by three inches in thickness. The front supports are two and one half feet long and the rear ones fifteen inches. The roosts are four and one half feet long, formed of scantling two inches wide and placed eleven inches apart. The rear roost is fifteen inches higher than the front perch. Dropping-board is not shown in illustration. ROBERT CONOVER.

## Biddy Knows Her Best Ration

THE poultry-keeper who allows his fowls the run of the farm does not need to bother himself so much about a balanced ration for the growing chicks or the hens. As long as the weather is warm, they will look pretty much after the balancing of the ration.

If the owner will throw out some wheat or barley and cracked corn night and morning, he can trust them to find something which will prevent any lopsidedness without any assistance on his part. When a hen runs up against a carbohydrate or an albuminoid she knows just what to do with it, and the poultryman or the farmer does not need to trouble his head about it. It's the one who keeps his poultry in limited space that should study the balanced-ration problem.

E. M. COUCH.

## A Convenient Chick-Feeder

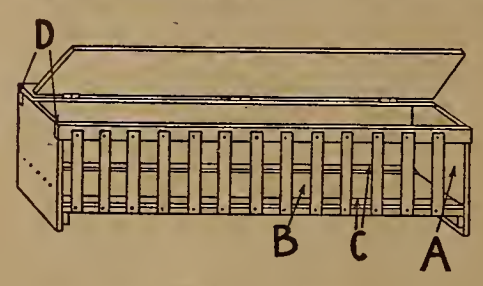
WHETHER one is in favor of either wet mashes or dry feeding, such an appliance as here described will often be found convenient. Feeding in open pans, on box-covers or boards results in the dishes being upset and the food scattered. As I could find in none of my papers or books a description of a feeder that suited me, I devised the one here described. It is eight feet long, twenty inches high and twelve inches wide, and will accommodate thirty-two hens or forty-eight half-grown chicks without crowding. Calculate four hens to each foot—that is, two on each side of feeder—or six chicks and build any length desired.

Of dressed lumber seven eighths or one inch thick it requires two end pieces 12x19 inches; one piece for bottom, 12 inches wide and 8 feet long; one 9 inches by 8 feet; three 4 inches by 8 feet, and sixteen laths 4 feet long.

Cut notches one by four inches in the top corners of the two end boards (AA) and nail cleats below a line five inches from bottom ends. Then bevel four laths (CC) and nail them along the edge of the bottom board, the thick edges flush with the edges of the board, to prevent the feed being raked off the sides. Set up the end boards, lay the bottom board on the cleats and nail it to them, also nailing through the end boards into bottom board. Then a four-inch board (DD) is nailed into the notches at the top on each side, and the frame is made. Cut laths into twelve-inch pieces and nail on each side, with spaces the width of a lath between each two. Use small nails for laths so that none will protrude through inside the feeder. Finish both sides alike.

For the top, nail a four-inch strip on top at one edge and hinge to it the board nine inches wide. This allows the lid to project over the side, making it convenient to open. If the lid were the full width of the feeder, it would, when thrown back and having several fowls alight on it, be liable to tip the feeder over. Two or three blocks nailed on top for the lid to rest upon enable one to get hold of it easily.

If one ever expects to use the feeder for chicks, he could use slats three inches wide




and two and one half inches apart. If built for chicks alone, the spaces between the laths need be only one and three fourths inches.

This feeder if used in the scratching-shed will be scratched full of litter, but in every other location it is just what every poultryman needs. A. E. VANDERVORT.

## Right to the Point

If yon want your poultry fed right, do it yourself. Then there will be no kick coming.

If you cannot get but one this year, get a brooder and wait for the incubator until next season.

As the hot weather comes on you will have to be more on your guard against lice and such things. Here is where stitches in time count far more than any number taken later.

Did you know that your hens don't like to enter a jumping-match every time they get down off the roost? This is particularly true if they are big and heavy. Just as sure as you put the perches up high and make heavy hens jump down on hard floors, you invite bumblefoot. Did you ever have a stone-bruise when you were a boy? That is about what bumblefoot is.

## Green Food for Next Winter

A MICHIGAN subscriber writes: "I would like some information as to what I could plant in my garden of about one fourth acre to provide green winter food for the chickens. I shall, of course, plant some corn and pumpkins."

Answer:—You will want in the vegetable line more than corn and pumpkins. In fact, corn is one of your dry feeds, and pumpkins are not relished by chickens as green food. You will want both cabbage and mangel-wurzel, and if you have room, Swiss chard, which is a foliage beet, raised for the leaves. Mangel-wurzels are a kind of sugar-beet.

In feeding these, a good plan is to split the root so that the fowls may help themselves to the inside. This keeps it cleaner than throwing it to them cut in bits. These mangel-wurzels are prolific, and you could grow a lot on a small patch.

Kale is another good green food for chickens. This or chard can be chopped up, salted and stirred in with a daily mash of some kind. Dwarf Essex rape is highly esteemed, but where one must depend on a small patch to supply green food, I like rye best. When the vegetables are all out of the garden one can rake over the ground and sow rye. This remains green nearly the winter through. When this gives out—unless there are plenty of vegetables left—I resort to clover-hay or ground alfalfa. Chickens especially relish the blossoms on clover-hay. I seldom steam clover-heads—merely throw in the hay and let them help themselves. If I make the litter on their floor of clover-hay, they soon get that floor bare. Once in a while I throw salty water over it. While salt in quantity will kill chickens, yet they are kept in better health by a reasonable amount of it in their feed. Clover-hay brings me more eggs from my winter layers than any green food I have as yet ever fed them. I. M. SHEPLER.

## Eye-Wash for Poultry

A FRIEND of FARM AND FIRESIDE near Charlestown, West Virginia, has a clutch of chicks about three weeks old that are suffering from a wart-like growth around the eyes, head and bill, which causes the eyes to become swollen shut; otherwise chicks seem healthy.

Poultry experts are not entirely agreed on this disease. It has, however, been found that permanganate of potash, obtained at any drug-store, is the most satisfactory remedy yet found for this and similar disorders.

One ounce of the permanganate is made into a solution with three pints of water, into which the chicks' heads are submerged several times a day. This same mixture is diluted for a drink for the chicks, one pint of the solution to three of water.

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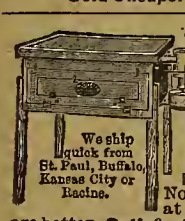


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# Poultry-Raising

## Caring for Young Guineas

THE guineas are usually hatched under chicken-hens. A good-sized Wyandotte hen can cover from seventeen to twenty guinea eggs. We usually set two hens at the same time and when the guineas are hatched all of them are given to one hen and the other hen either broken up or set again. The hen and the young guineas are put in a box where they will keep dry and the young guineas cannot escape or get lost.

They are kept in confinement until the guineas are a week or ten days old. Then if the weather is pleasant, they are turned out during the day and allowed to depend largely upon themselves to secure food. While the guineas are young they are given a little hard-boiled egg, some bread-crumbs or coarsely ground meal fed dry. They are given water to drink, also some sweet milk occasionally.

In rainy weather keep the young guineas in a dry place, as they are very tender while young and cannot stand much cold. They should be gathered to the shelter before any hard rains. Last summer we intrusted thirty-seven young guineas to one hen and she did well by them. After the guineas are four or five weeks old, they are able to care for themselves so far as the food is concerned, but they will continue to run with the mother hen until they are nearly grown.

If provided with a suitable roosting-place, they will come in every evening to their accustomed place, go out early in the morning in search of bugs and worms, and stay until late in the evening. They will grow fat and plump and will care for themselves until winter sets in, shutting off their supply of food from the fields. Do not hatch young guineas until warm weather. June and July are good months for the young guineas to hatch, although they will grow to marketable size by Christmas if hatched as late as August.

FARM AND FIRESIDE readers will doubtless be interested in the guinea market. Quotations of December 15, 1910, for the Philadelphia market were:

| | Per Pair. |
|---|---|
| Young guineas, two pounds each and over | $1.00 |
| Young guineas, one and one fourth to one and one half pounds, each | .80 |
| Young guineas, one pound each | .60 |
| Old guineas (plump) | .60 |

The flesh of the young guinea is of very fine flavor, and is a close rival to that of the quail.

That city people are begining to find this out is clearly shown from the above market quotations, which are nearly double those for the same date twelve months previous. A short time ago a Baltimore dealer quoted young guineas at forty-five cents each.

Guineas hatched in June, July and early in August will easily reach the two-pound class by the first of December. A. J. LEGG.

---

A word to the wise from an Indiana correspondent: "Did you ever try to catch a chicken by running it around the barn-lot, cow-lot, over the garden fence and finally finishing up in the pasture, after you felt you were more run down than the chicken? Now you can save your health and catch the chicken in half the time if you will walk it down, instead of running it down. Walk just fast enough to keep the chicken running without using its wings."

A Montana poultrywoman writes thus: "Here is my cure for roup. After the chickens have gone to roost close all openings of the hen-house. Place some live coals in an old pan or pot near or under the roosts. Pour onto the coals half an ounce or more of carbolic acid and close the door. The resulting fumes will not harm the chickens, but will help the roup. It surely cures. Try it."

---

## A Good Start Half the Battle

FEEDING chicks and giving them the right kind of start is not so easy as it looks to the beginner. Irregular and improper feeding stunts them worst. Barring gapes, the most common and dreaded disease is bowel trouble. Many farmers will feed a sloppy mess of raw corn-meal, mixed with cold water, twice a day, and then will wonder why they lose all their chicks. Corn-meal is a good feed if mixed with hot water or milk and properly cooked, but raw corn-meal and water is a sure producer of bowel trouble. The raw meal ferments and sours in their crops and this acid mass causes irregularity of the bowels.

Overcrowding, dirt and impure water are all causes of bowel troubles and should be carefully avoided. It is a good plan to put a little lime-water in their drinking-water as a tonic.

For the first few days I feed hard-boiled eggs and oatmeal five times a day, and afterward a chick-food mixture. Most of the prepared chick foods on the market are well balanced and consist of a variety of small grains which all fowls, both old and young, need. If a prepared chick food cannot be obtained, feed a variety of cracked corn, wheat, millet-seed, etc., for the more variety you give them the better.

If you do not have grass runs for your chicks, supply them with some kind of green food, such as lettuce, lawn-clippings, etc. Meat is another important item. If they are yarded they should be given green bone or good beef-scraps, but if they have free range they will find enough bugs to supply their needs.

They cannot properly digest their food unless they have grit in some form.

Care should also be taken to see that your brooders and brood-coops are kept clean, for filth invites disease and lice. I clean my coops and brooders thoroughly about every day and spray once a week either with coal-oil and carbolic acid or a commercial liquid lice-killer. A few lice will suck the vitality out of the strongest chicks. If your chicks stand around with closed eyes and drooping wings, you may be pretty sure that they are covered with lice. Guard against lice from the start, for once they do come it is almost impossible to get rid of the pests.

A. E. VANDERVORT.

---

Do your ducks lay double-yolked eggs? You are probably overfeeding them. Quit it and see.

Get some sand or fine earth to scatter around on the floors of your houses now, before warm weather comes, to keep the droppings from sticking to the floor.

You are fitting your poultry now for the whole season's work. Be fair with them in the matter of care and feed now and they will be just as much so with you in the days to come.

Some folks get the idea that some kinds of hens are more apt to be troubled with lice than others. That's a queer notion. Lice are the fault of the man, not of the hen. Clean up, man alive. Then, no matter whether your hens are Leghorns, Wyandottes or Rocks, they will all be happy and free from pests.

One good way to tell if your poultry-house is built right and in the right place is to watch for signs of dampness. If the floors and everything are damp a good deal of the time, the probability is that your house had better be snaked right off to some higher, better-drained ground and raised up a little from the earth.

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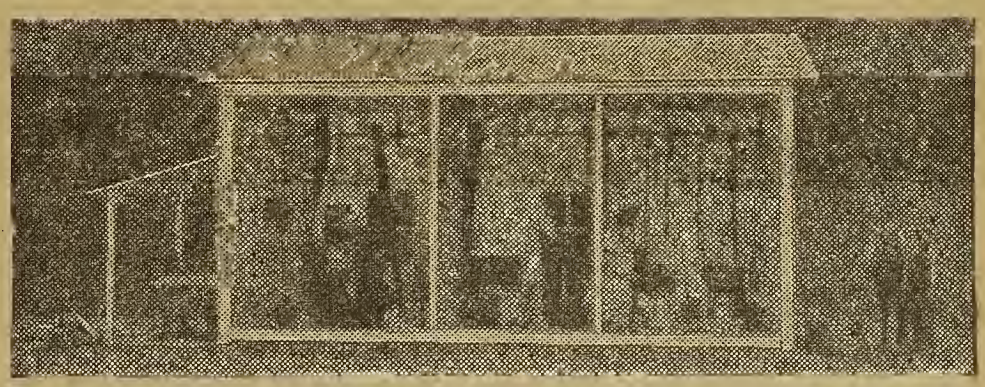

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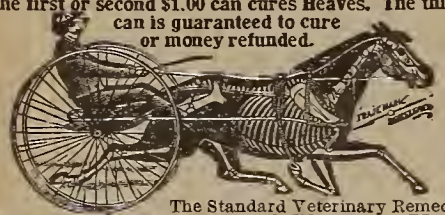

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# Live Stock and Dairy

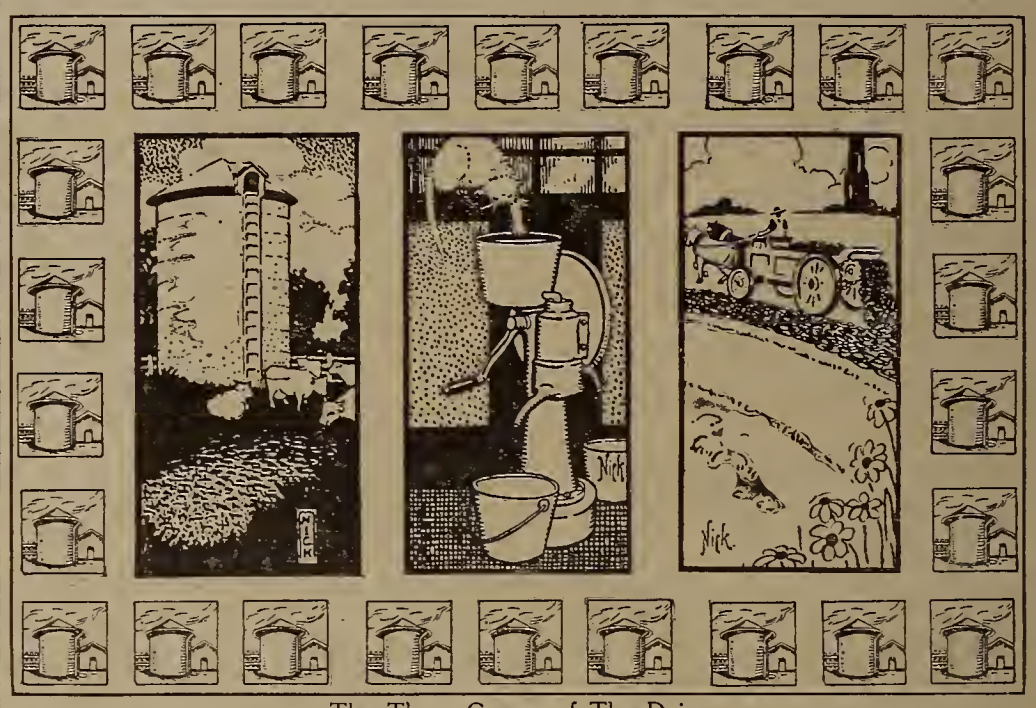
## Three Graces of the Dairy

WE OFTEN hear the question asked: "How many cows should a man have before he is justified in building a silo?" I am keeping eight head now and last summer I bought a forty-ton stave silo and am so well pleased with the results from feeding silage that I believe if I had only four or five cows I should have a silo. It solves the winter feeding problem here in Ohio more completely than anything I have ever tried.

We had four acres of fair corn and it was enough to fill the silo, but it settled about six feet. We began feeding October 15th and gave the cows an average of thirty pounds a day. We feed silage in the morning, mixing about one half pound of cotton-seed meal with it and at night we give about twelve pounds of alfalfa and a grain mixture of three pounds of corn and cob meal and two pounds of bran.

We water once a day, at noon, in the barn, warming the water to about sixty-five degrees. We find they drink considerably more water when warmed, and then they are not chilled by the cold water. Our cows are giving a better flow of milk than when on pasture last summer, and much better than they did last winter, before we had a silo.

I would not think of keeping cows without a silo, even if I had to borrow the money to buy one. When I started out with cows, I set my head to have three things as soon as I could afford them—namely, a separator, a silo and manure-spreader—and I have all three now. They are three graces of the dairy that soon pay for themselves. Others may not see it that way, but after one has used them a while, he will have the proof of the pudding. S. H. PLUMER.



The Three Graces of The Dairy

## Live Stock Make the Farm

MR. ABRAM PHILLIPS figured out in a previous issue of FARM AND FIRESIDE that the silo is a profitable investment on the small farm. I wish to say from my experience that Mr. Phillips figured it about right, as the silo is a good thing for the small farmer. The one place where he goes lame is in the small number of cows, only two, for the size silo he had figured. I would want six head, say four milch-cows and two steers, or some dry cows and shotes. Now this extra number of stock would not be against the small farmer, but just the making of him.

My experience, here in Indiana, with a small silo and also a small number of cows and cattle has been that we always had some moldy ensilage. We had no way to test the loss, if any, by molding. Our stock ate it all up clean and did well, and that was good enough for us.

One of the professors here has a silo he just finished filling last fall. A man said, "Professor, how long will it be before that stuff gets ready to feed?" The professor said, "In the morning." The man said, "I didn't know that." He thought it had to work like kraut. The professor said the reason he did not feed out of the silo that night was there was plenty around the cutter. Now if he has cows enough to feed it down two inches or so every day, there will be no mold, but in five or six months it will all be fed out.

When the silo is filled to the top, it should be tramped well every morning for about a week. You will then find it has settled down a good deal. This will be a big loss in space at the top of the silo. How to get this space filled is a problem. It is too much space to lose, so we sometimes top ours twice. The last time we pull off the ears of corn, so as not to lose any corn in the top mold.

In feeding, we hold our silage in reserve for two months or sometimes more, feeding late sweet corn, pumpkins and anything that we may have. Then when we get ready to begin on the silage, we go to the top and take out a two-foot door. We don't remove the mold crust on top, but commence to take the hot silage out from under the crust; then, as the crust falls in, we dump it out to stock cattle.

We like this better than to take off the top every day, for then the ensilage is cold. We take off in courses two and one half to three feet deep and we have warm feed all the time. HARRY NICHOLS.

## Silo for a Small Farm

ABOUT ten years ago my father and I decided to build a silo on our New Hampshire farm in an economical way. We cut hemlock logs in the woods, hauled them to the sawmill and had them sawed into lumber. We built the silo thirty feet high and seven feet square on the ground. It is situated in the bay of the barn and extends from the high beams to the barn cellar and has three doors.

We hired a carpenter to help us do the wood work, but put in the cement foundation ourselves. It took less than a week in all and it was all double-boarded, the inside planed and the boards fitted tightly together so as to be air-tight. For the doors I made matched boards, which I put in place as the silo was filled, and removed as I took out the ensilage. The whole cost was less than fifty dollars, not counting the value of the lumber and our own time.

The first of September the corn was harvested and put into the silo with an ensilage cutter and filler owned and operated by a neighbor. The silo was filled in a day, and did not prove an expensive job, costing ten dollars. The ensilage was carefully tramped and it kept well. We commenced using it November 15th, feeding about four or five bushels a day to seven cows.

It lasted into March, and both the cattle and myself were sorry when it was gone. There was almost no waste, only a few inches spoiled on top when first opened and a little around the door. I have filled this silo every year since the first and have never spent a cent for repairs. It appears to be as good now, for all I can see, as when first built, and as it is indoors it needs no paint.

In my mind, there is no doubt but what a silo, not too large, is a great benefit to the farmer who keeps less than ten cows, and is making either butter or sells milk. I have yet to hear of the farmer who regrets building a silo. FRED FASSETT.

## The Small Silo is Practical

HAVING read Mr. Abram Phillips' article on the small silo and seeing the inquiry by the editor on the same, in the February 10th issue, I will relate my knowledge about the small silo. The silo is a profitable investment to anyone who keeps cattle, and especially to those who raise corn to feed them, but the corn crop is not necessary, as cow-peas, clover, alfalfa or a mixture of these may be used in the silo with profit and success.

But for the small silo. This Ohio neighborhood in which I live is a great dairy section and three fourths of the farms have silos on them. The silos are from four to sixteen feet across and from eighteen to thirty-six feet in depth. The size varies with the amount of stock to be fed. Some farmers have more than one silo.

We have a round silo, the diameter is nearly nine feet, and thirty feet deep, besides a ten-inch foundation. Four acres of good corn will fill it, making about sixty tons of silage. Ten head of cattle are fed from this about eight months of the year.

If the ensilage-cutter is kept busy, the silo can be filled in from three to four hours. We hire the machine for one dollar and fifty cents per hour; teams and pickers are extra. I would advise every farmer with forty acres of good tillable land to build a silo.

F. R. ZETHMAYR.

# Live Stock and Dairy

## Dairy Profit and Loss

Sixty Hours a Year per Cow

I once saw two cows in a farmer's pasture which looked almost alike. Judging by the form alone, I would just as soon have bought one as the other.

But their records, as kept by the owner, were far from being similar. I was surprised to learn that one cow gave eight thousand pounds of milk a year, and her products sold for ninety dollars in excess of the cost of feed. The other one gave but six thousand pounds of milk and yielded a profit of only sixty dollars. There was thus an annual difference of thirty dollars between the two.

Some interesting figures along these same lines have been tabulated in Illinois. A dairy expert traveled over the state and established the record of 554 cows kept for dairy purposes. These were classified into four groups, according to their degree of profit, based on the amount and the test of the milk.

### One Cow as Profitable as Forty

The first class of one hundred and thirty-eight cows gave a profit of but one hundred dollars for the group. The fourth class gave a profit of one thousand dollars. On this basis it was calculated that one cow of the best group would be as profitable as forty of the poorest group, and, as the number of cows kept increases, the relative profit and loss is multiplied accordingly.

This goes to show the enormous difference even a few pounds of milk, one way or the other, make in the profits of a dairyman. As the average annual cost of feed per cow is about thirty-five dollars, it is evident that the higher the production rises above that amount, the greater will be the profits.

Many dairymen are often somewhat at a loss just how to figure out whether their venture is a profit or not. The following plan is a good one.

The first factor that enters into the production of milk is that of stables. A good average cost would be fifty dollars per cow for shelter. A stable housing twenty cows may be built, here in Wisconsin, for about one thousand dollars, but, of course, local circumstances vary. Figuring depreciation and interest on that investment at ten per cent., the cost of housing a cow is five dollars for a year, a very reasonable and liberal figure, and one which should not be begrudged.

### Value of the Average Cow

Then there is the value or the cost of the cow. Some are worth thirty dollars, some several hundred. The average value of milch-cows in the United States is $40.49, according to latest government reports.

Feed is the heaviest factor in the cost of production. This varies greatly in different sections of the country, being about thirty dollars in Iowa and fifty dollars in the East; thirty-five is probably about right.

The cost of labor is also considerable. If one man, devoting his entire time to the dairy and caring for about twenty cows, is paid forty dollars per month, the care of one cow will come to twenty-four dollars a year.

As it takes at least sixty hours a year to milk a cow, this help at fifteen cents per hour would make a milking cost of nine dollars per cow. But as on the majority of farms the members of the family take an active part in milking, a rough average of the extremes (of no expense and twenty-four dollars a year) will give fifteen dollars, a fair figure for care and milking.

### To Tell if Bossy Earns Her Salt

For such miscellaneous expenses as dairy supplies, barn equipment and medical treatment, another five dollars per head per year may be added, bringing the total cost of keeping the cow to sixty-five dollars per year. Income below that sum would go to balance the expenses, and any sum above that amount would be considered as profit.

The calf is the first source of income. This may be worth nothing, or it may be worth a hundred dollars. Five dollars is a fair estimate for veal-calves.

A cow's manure is worth more than the average farmer realizes. If every particle were saved, it would amount to nearly thirty dollars a year. But American farmers do not save all, and allow a waste through leaching, so that ten dollars is about right.

Taking the ten dollars for the manure and the five for the calf would leave about fifty dollars as the value of the milk that must be produced to make expenses meet.

Does the income from each cow in your herd exceed fifty dollars? Figure it up from the sale of your milk, butter or cream. Do a little figuring and see if you milk any of your cows sixty hours a year for nothing.

Wm. A. Freehoff.

## More About Shoe-Boils

I wish to offer an addition to the suggestion of Mr. Williams in regard to shoe-boils on Page 19 of Farm and Fireside for February 10th. My remedy for this trouble in horses is very simple, but has proven so effective I cannot refrain from giving it.

I make a saturated solution of good strong vinegar and saltpeter, and rub the boil with it twice each day. It will begin to decrease in size in a few days, and if continued for a short time will entirely vanish. This is better, I think, for the horse than cutting into the cyst with a lance or applying a blister, and I have found it very effectual.

E. M. Bacon.

## Zebra Hybrids

When Negus Menelik of Abyssinia presented two fine Grevy zebras to ex-President Roosevelt, he regarded them as ornamental creatures that would make an interesting addition to the Zoölogical Gardens in Washington. But the ex-president saw in them the possible solution of the beast-of-burden problem that has so retarded the development of Africa.

Eighty per cent. of the oxen imported into East Africa die within the first six months, horses cannot stand the climate, donkeys are too small and too slow, zebras won't work, and African elephants, since the days of Hannibal, have never been trained to make themselves useful.

If the strength of the zebra and the working qualities of the donkey could be combined in one creature, the greatest obstacle to the development of the country would be overcome. The zebras were given into the keeping of the Bureau of Animal Industry to experiment with as they would.

Breeding the zebras to mares has as yet been unsuccessful; no living progeny being produced. With jennets the experiments have succeeded better, and the bureau now has eight young zebrasses. Of the various important breeding experiments with draft animals, few are as interesting and encouraging, at the present time, as these experiments.

Three of the zebrasses are now two years old, and have been broken to drive single and double. One of them has been broken to the saddle. Their conformation and action leave little to be desired, and they promise to have great industrial value. Unlike their sires, the hybrids have good dispositions, and little difficulty was experienced in breaking them.

Zebra-hybrid breeding is still in the experimental stage, and no one can foretell its future. But indications point to its one day becoming a great industry in our South-

Zebra Hybrids in Washington (D. C.) Zoölogical Gardens. Sire "Dan" from Abyssinia at Left, Dam at Right

west. Climate and soil there are admirably suited to zebra-raising. If the hybrids fulfil their present promise, the demand for them will be something enormous. It will be years, at least, before the African call for beasts of burden can begin to be supplied, and it is more than likely that the demand will be echoed within the borders of our own country before we have any for export.

Eugene Smith.

## Strippings

The cows know when the milking-hour comes around. Do you? And do you always attend to the milking when it does come? The cows expect it. About eighty-seven per cent. of pure milk is composed of water. Moral: See that the cows get plenty of pure water to drink.

Good butter-making must begin with the milking. Scrupulous cleanliness in all operations in handling milk will do much in influencing the nature of the final product.

If, when you remove the calf from its mother, you want the cow to forget it in the least time possible, remove it completely beyond her sight. Do not put it in an adjoining lot, where the mother can see it through the fence.

W. F. Purdue.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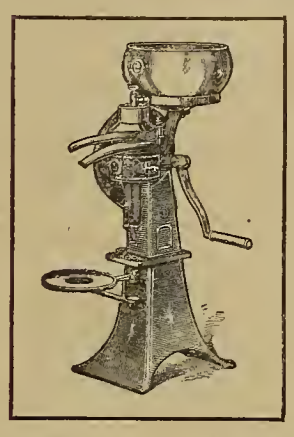

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If you purchase the so called "cheap" separator you must pay cash in advance and then take the chance of the machine becoming worthless after a year or two of use, to say nothing of the cream it will waste while it does last,—all of which means that you have virtually thrown away the money invested in the cheap separator and wasted your time, labor and product in the bargain.

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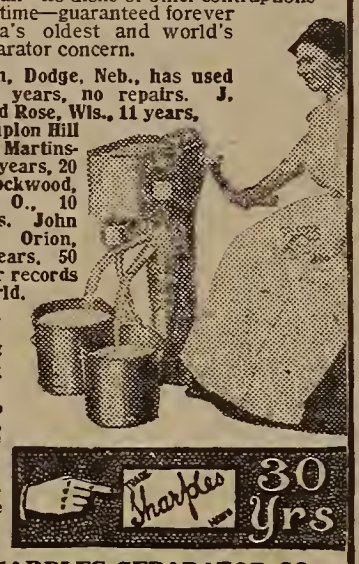

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# Live Stock and Dairy

## Live-Stock Forecast

THE month of March seemed to feel himself under no obligation to go out like either a lion or lamb in the live-stock market. This year he went out like a whipped dog with its tail between its legs. This is especially true of the beef-cattle market. The great query for the farmer is, "Why?"

All through March the supply of cattle at the yards was below normal, and then, instead of a rise, there came a break of a quarter of a dollar in price. Several things are thought to have something to do with this. In the first place, the demoralization of the egg market put a good food on the tables of the people at a decreased-cost-of-living price. Same with mutton, on account of the Northwestern and Western droughts last year. People with stomachs full of eggs and mutton can't eat beef. Then there are those who say the consumer feels "sore" because the slump in beef-cattle prices has not been followed by low-priced beef on the hook. Maybe this has something in it.

There are those, too, who blame the packers—and there may be some blame there, too—but insiders say that the beef-slaughterers have been trying to work off stocks as low as eight cents for the carcass, and haven't been able to get the people to take the goods. There seems to be no good reason to expect much better prices for beef on the hoof than will come from the ordinary swing of prices from the present stage. And those who have cattle on hand should remember the tendency of a sag to make things worse, by causing a rush of stock to market.

### Cattle Must Go Up or Hogs Down

Certainly, beef-cattle have got to go up, or a lot of feeders are going to lose plenty of money. Feeder stock has been following beef-cattle across the scales and selling at about the same figures as the fat ones. It will be recalled that in the middle nineties the willingness of the banks to lend on cattle paper caused a similar condition, and there were seasons when feeders sold their fat cattle for about what their purchase loans amounted to. We don't care to take a pessimistic attitude, but it's just as well to remember that feeding for the manure alone isn't a permanently remunerative business. One would like to get a little something for the corn, to say nothing of the labor of puttering around the feed-lots and cribs for six months.

Hogs have been well sold all spring, and at this writing the outlook is hopeful. There have been heavy runs which have been bought at good prices. The difference between the market conditions of hogs and fat cattle has been marked. In the end, of course, cattle must go up, or hogs down. But the packers act as if they do not expect any huge crop of hogs to come in later in the season, and as if they would like to encourage us to stay in the hog business. Lard has found an unexpectedly active demand for export, and the scare over the driving of lard from the kitchen by the various vegetable oils is about over. In the meantime it is well for Northern farmers to take note of the fact that the long campaign of education in the South in favor of hog-raising is bearing fruit, and that the South and Southwest are sending a lot of hogs to market. Even the Panhandle of Texas is getting into the game with hogs fed on alfalfa and finished on milo-maize and Kafir-corn.

### April Prices for Beeves

Stockers are imitating feeders in calling for prices, for which there is no justification in the price of beeves. April came in with feeders selling for from five dollars and fifty cents to six dollars, and stockers from five dollars to six dollars, according to the location of the market, as well as the quality of the animals. Most of the pastures and feed-lots have been filled up at about those figures. With good killers around six dollars, where is the buyer coming out? Evidently our stockmen are possessed of great optimism, or are able to get money easily on cattle paper.

As bearing on the question of future prices, we are perplexed by the fact that there are some two hundred thousand hold-over cattle ready to come on in a few months from Texas, and that a whole lot of drought-bitten Texans moved up into Oklahoma last fall and have dropped out of sight. Scouts sent out from Fort Worth to find them say they aren't there, but there is a well-grounded suspicion that they are somewhere, and that they will come into the yards one of these days. Every man must judge for himself as to the outlook for beeves.

### The Weather and the Mutton Market

The prices for sheep during the summer ought to be better. The glut on account of the last year's drought in the range country is over, and the market is stronger than at last writing. Texas, after her drought, has had good rains, and will have more grass this summer than sheep. They are restocking their ranges, and will probably send fewer sheep to market than usual and be late in doing it. Watch the weather maps for the range country, if you are in sheep, and remember that every good rain in the range country makes local demand for the bleaters, which will leave the sheep-houses in the yards sparsely populated, and ought to benefit the farm flockmaster—for this year. Next year it will be different, of course. There will be a new situation to be considered.

## War on the Worms

A READER describes a case of intestinal worms in hogs—worms of the large round species, most probably. The symptoms, as he gives them, are as follows: "Shotes are long-haired, poor and not growing well. Their backs seem drawn up." Other common symptoms, not mentioned in this case, are, with swine, unusual hunger, apparent tenderness of the belly and vomiting. The surest sign of the trouble is, of course, the passage of worms or their eggs in the excreta.

Dr. C. D. Smead advises: "When intestinal worms are suspected, dissolve a teaspoonful of the dried sulphate of iron in a pint of water for each animal (shote), sweeten with molasses and use the medicated water to wet up a mess of slop for them every morning for a full week. Then give Epsom salts in the feed, a tablespoonful for every one in the lot, sweetening the feed with molasses. This will physic away the worms. Wait a week, then dose them again as before and they will probably be rid of the worms.

"Keep a large heap of ashes for the hogs to root in and eat. As a last precaution give a teaspoonful of sublimed sulphur for each hog in the feed once a week."

## Deficient Teat

A GEORGIA subscriber tells of a case of a Jersey that has never given milk from one teat. She has had one calf and is due to freshen again. In such cases there is little hope of milk being produced from the deficient teat.

Yet sometimes, when a young cow has her first calf, one quarter of the udder does not develop, which may produce milk the second time she freshens. A little while before she freshens, it may be worth while to spend about twenty minutes each day hand-rubbing and kneading that quarter of the udder. Sometimes that will help the trouble.

C. D. SMEAD.


Barn of S. P. Strickland, Bangor, Me., covered with Amatite Roofing.

# Amatite Roofing
## A Roof That Needs No Painting

Amatite has a *real mineral surface* which needs no painting.

The above illustration shows the barn of S. P. Strickland, Bangor, Me., which was roofed with Amatite three years ago. The owner's opinion of it is expressed in the following letter which we recently received:

"Gentlemen:—The Amatite Roofing purchased three years ago and placed on my barn, has given most satisfactory service. The Roofing is unusually attractive in appearance, and in my judgment is the most durable and satisfactory made. The fact that it requires no painting appeals to me very strongly, and this feature makes it by far the cheapest ready roofing on the market.
"Yours very truly,
(Signed) "S. P. STRICKLAND."

Every practical man will see at once that painting roofs is an expensive nuisance. If the roofs fail, the manufacturer always claims that they are not painted often enough, or that you did not use the right kind of paint or something of that sort. After Amatite is laid there is nothing more to do to it.

If we sold Amatite at a price 20% higher than the old-fashioned "Paint-me-often" kind, you would be justified in buying it. You would more than save the extra cost by eliminating the paint in after years. Amatite, however, costs *no* more than other first-class roofings, and it gives twice as much weight of roof per square foot.

A sample of Amatite showing the mineral surface will be sent free on application. Address our nearest office.

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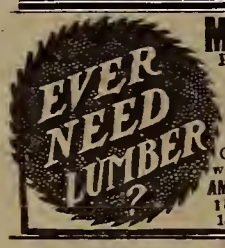


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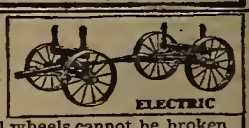


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# Farm Notes

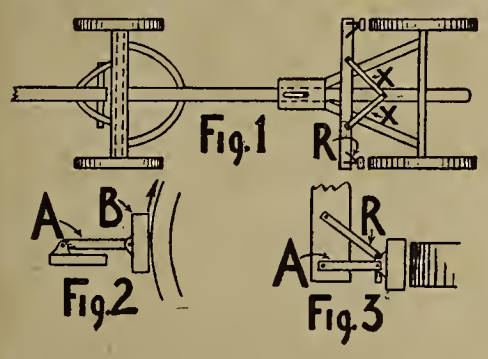
## Automatic Wagon-Brake

THE accompanying sketch shows the construction of a very effective wagon-brake, which can be attached to any wagon.

Cut a slot in the reach about three inches long at the point where the reach-pin is inserted. This will allow the reach to slide back through the hounds of the hind axle, while the wagon box or rack, carried by the back bolster, slips forward on the front one. Next bolt the brake-beam to the reach at the point which will allow the brake-blocks to just clear the wheels when the reach is drawn to the foremost extremity of the slot.

In descending a hill, the horses, by holding back, force the front bolster back along the bottom of the wagon-box, carrying with it the reach, which in turn carries the brake-beam with its rub-blocks backward against the wheels. Thus the harder the horses hold back, the more effective are the brakes. In this way the brakes are being constantly adjusted to the varying grade of the hill. When the horses have to pull, the first effect is to draw the front bolster, the reach and the brake-beam forward and thus disengage the brake-blocks.

The chief difficulty which arises in the use of this kind of brake is the friction between the wagon-box and the front bolster. This friction determines the efficiency of the




brake, since it holds the reach and brake-beam from sliding back and engaging the brake-blocks against the wheels. By placing rollers in the front bolster this friction can be eliminated.

When a wagon fitted with this brake is to be backed up the brakes would naturally be set very tight. This obstacle is overcome by the device shown in Fig. 2. The wheels turn in the opposite direction while the wagon is being backed up. Thus the brake-blocks (B) are lifted on the arms (A) and rendered ineffective by the back turn of the wheel. The brace-rod (R, Fig. 3) is to prevent the brake-block (B) from swinging sidewise and missing the rim of the wheel. To prevent the brake-beam from turning on the bolt which fastens it to the reach, the brace-rods (X, Fig. 1) are attached to the brake-beam and to the reach.

The above wagon-brake is original and has been used with complete satisfaction for over two years. It is not only easier on the horses by adjusting itself to the grade, but it is also much more convenient for the driver. MONROE CONKLIN, JR.

## Swing Lantern-Hook

HERE is a hook to hang a lantern on in the barn. I took two eye-bolts and drove them into a post about seven feet from the floor, then I took a broken tooth from a horse-rake and bent the long end first in a drop curve, then up hook shape. This can be done easily by first heating it in the stove. The hook swings to either side out of the way when hauling in hay. V. T. LUNDVALL.

## Practical Barn Bath-Room

AN IOWA farmer has rigged up a bath-room at the barn, connecting it with the elevated windmill tank so that it is provided with running water. It is fitted with a convenient bath-tub, lavatory, mirror, etc., and has a smooth cement floor. Its cost was comparatively small and he considers it one of the greatest conveniences upon his thoroughly modern farm and one of the best paying investments he ever made.

During the principal farming season, when the men, of course, get very dirty during the day's work, they can attend to their noonday ablutions and evening baths before coming into the house. The bath-room is large enough to serve as a dressing-room, so that the men may use it in changing from their working clothes. It is a great saving of labor to the housewife. M. G. RAMBO.

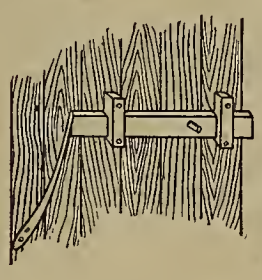
Sow about four or five pounds of good clover-seed on the rye or wheat field where the stand is sparse and the yield promises to be low. The clover stand thus secured will not injure the other crop in the least and may be utilized as fall pasturage after the grain crop is removed. E. L. V.

## Drainage Offsets Drought

IT MAY naturally be thought that crops on a drained clay soil will suffer more in a season of drought than those on an undrained clay, the quantity of water held near the surface being undoubtedly greater in the latter case.

This supposition is unfounded; indeed, the reverse is found to be the fact. The roots of the crop are far more widely distributed in the drained soil and are thus far better able to obtain water. Furthermore, the movement of water is more speedy in a drained than in an undrained soil. W. R. GILBERT.

## Spring for Sliding Door Latch



THIS is a spring for a barn door which has a sliding latch. Take a piece of wood (hickory is preferable) and cut out a piece about eighteen inches long, shave down one end and place in position as shown in sketch. HOWARD W. FOSTER.

The proof of the crop is the bank account.

Lifting a beer-glass will never lift a mortgage.

## Advice to Tenderfoot Farmers

AS A practical farmer I have read a great deal about the "back to the soil" movement here in New England. It is a great thing; but the government ought to pass a law to protect the new-comers in the farming business. A good many of them need guardians to keep them from being swindled. If the Department of Agriculture had a Farm Bureau in every state, to find the real value of all farms and tell the character of the soil and about what it will yield, it would be a great boon to tenderfoot farmers.

Nowadays selling a farm is about like a gold-brick scheme. The natives don't wait for a new-comer to set up his bed before they are at the door with a run-out cow, professed to be a new milch; but the calf with her may be one they bought for a dollar.

Or they may have found some old glandered horse that could not pull the skin off a rabbit.

There have been scores of would-be farmers who have come to this territory in five years and returned to the city to almost starve until they found a job.

They take hold of the wrong end of farming at the start. If one does not know all the ins and outs of farming, he had better let it entirely alone. If a man has eight hundred or one thousand dollars to start with, let him pay not more than one hundred dollars down or two hundred dollars at the most. Let him get someone to help him buy five or six cows, a horse and some second-hand one-horse tools. That will leave him some money to live on.

If he fails, he can get nearly all and oftentimes more than he paid for the stock and tools. If he does not fail, but finds his farm is not what was represented, he can go on a still hunt and find a bargain after he becomes better acquainted with the territory.

It has been correctly stated that "the native can never hold his own with a city chap who has learned the game!"

There is no place in the world like a good farm entirely clear from debt. A man with brains and common sense on such a farm is much better off than the President of the United States. Back to the farm, and work with both hands and both feet, and you should prosper! ROBT. H. CAHOON.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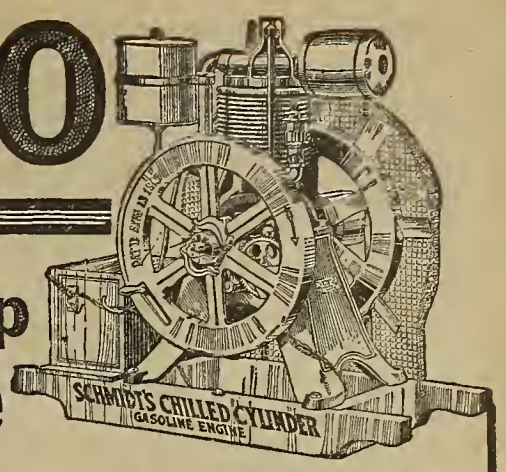


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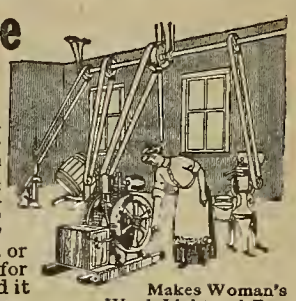

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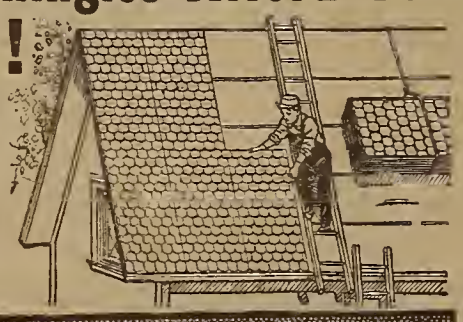

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## With the Editor

[CONTINUED FROM PAGE 2]

Now, I've not much more room for his creed. You have the substance of his Sixteen Articles of Faith, but I can only hint at the fifteen specifications under them. They are (1st) better Christian life; (2d) more lay workers in the church; (3d) better and more cheerful giving; (4th) better home life and surroundings; (5th) better and more scientific agriculture; (6th) "A new kind of rural schools;" (7th) better voting and cleaner citizenship; (8th) good roads; (9th) fuller intellectual life; (10th) more and better social life; (11th) games, sports and amusements for the young; (12th) better community life—especially in the matter of temperance; (13th) better health conditions on the farm and in the home and school; (14th) hope for the ambitious; (15th) coöperation in every way in which coöperation can help; (16th) upbuilding of helpful rural institutions.

* * *

Ten years has Bemies labored with these ideals in view. He has not done all he expects to do—in fact, it took him eight years to begin. But he has done so much that his fame has extended all over the land. I was told about him by a Boston man. They heard about him in Wisconsin, and he has just been put there to tell his story to a country life conference.

What has he actually done? Well, when he went there the church was dead—and the rest of it. It is now alive. It is the leaven in the loaf of that community. It has built a brotherhood house, in which it holds conventions, basket-ball games, entertainments, and the like. It will soon undertake the first of its agricultural activities, the coöperative marketing of guaranteed eggs. It could scarcely pay the salary of two or three hundred a year then, now it pays a thousand—to a ten-thousand-dollar man.

And now I think I'll just put in a letter I have received from a country minister—maybe from yours. I know who he is, but I'm not going to tell. Here it is:

I have been thinking for several months of saying good-by to the pastorate and going on a farm. It is almost impossible for me to live on my present salary. I have prayed every day to be kept from making a mistake. I love to preach. But when I see the indifferent church people I cannot help but say, "What is the use?" At one point on this circuit they are behind six months with my salary. Their actions indicate that they do not intend to pay up.

My boy is now out of school at work trying to help me make ends meet. Years ago he used to say, "Papa, when I get to be a man I'll be a preacher," but he does not say that any more.

The most of my members are farmers. They would go into bankruptcy if they made no more than they pay their preacher. One man bought a small farm five years ago, giving his note for $1,750. During that time he has lived well, paid five hundred dollars interest and has accumulated enough live stock to pay the debt. I heard him say so yesterday.

Another last year asked me if I couldn't save some money. They promised to pay me—mark you, promised—five hundred dollars and yet I had fuel to buy, also water, horse to feed and keep shod, a family of six to feed and clothe. Having sickness, had to hire a girl to do the cooking. He was surprised when I told him I could not save a cent. He lived on a good farm, from which he made a large sum, was county commissioner, for which he received nine hundred dollars per year plus mileage, drew a large pension, received fourteen hundred dollars for an interurban going through his farm. He belonged to a church where they paid—actually paid, the year before, sixty dollars pastor's salary. He kicked like a bay steer when at the first quarterly meeting of last year they raised it to seventy dollars.

I appealed to the W. H. M. S. every year until I got ashamed and quit. I haven't a decent suit of clothes at this writing. I hate to go to conference with what I have, but see no help for it. I do not want to appeal to the W. H. M. S. and I will not. Oh, why will the Church not awake and do her duty!

YOURS IN HIS NAME.

This letter wrings one's heart. I hope it will go to the hearts of those who read it. I have no answer to it. But I think Bemies has. I think Bemies *is* the answer.

Herbert Quick

In going to a large town or city it is very interesting to visit the big stores and factories, and see the manufacture and exhibition of all kinds of goods and wares. But if you cannot do this, it is surprising how much pleasure and profit you can derive by looking carefully through the catalogues which these big concerns send out. Many of them advertise in FARM AND FIRESIDE, and will be glad to mail you these booklets if you will send them your name and address.

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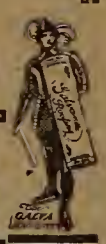

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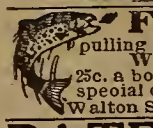

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# Tariff Revision From all Sides

## By Judson C. Welliver

It's an awful thing to start out deliberately to write a piece about the tariff. When you do it, it is from a sense of duty. You know that in all probability the gentle reader will pass you up in four languages and five kinds of profanity. And you don't blame him much.

There are different ways of writing about the tariff. Some people think it is desirable to sneak up on the reader, by starting out as if you were going to discuss some perfectly human subject, and then, after the fashion of the purpose novel, drag in the tariff by the hair of its head and point a moral which nobody is going to see, and which, anyhow, he is certain not to read if he recognizes that it is going to be a moral.

It takes courage, courage of the sort that made psalm-singing martyrs, to start your piece with the frank announcement that you are going to talk about the tariff.

### The Power of Two Million Votes

I account myself strangely bold—as I am ordinarily a timid person—when I herewith post these premises and sound warning that the appended observations relate to tariff, and that anybody who thinks he isn't interested in the tariff must not trespass here. I am emboldened to assume this perfectly frank attitude, by reason of some conviction that in the last two or three years practically everybody in these United States who reads must have discovered that he is really interested in the tariff. Somewhere inside of two million people, I suppose, resides the power which determines election results in this country. These two million people constitute the class that is liable to vote either way, according as they conceive the moral or the substantial elements in a campaign justify. These two million people are really the ones who decided that the Payne-Aldrich tariff bill was not what the country wanted and who issued the mandate to a Democratic House to make a new revision. Before this letter shall appear in print, the formal work on the new revision will have been started.

Personally, I am convinced that omniscience itself could not produce a tariff revision that would satisfy a majority of the country. That is one reason why I doubt whether our present tariff system is what the country needs, or whether it ever can be made such.

This is a protection country. Also, this is a protection world. Nearly everybody tells you nowadays that free trade would be an ideal condition if you could have it; but what's the use talking about it when nearly all the countries are engaged in a warfare of tariff? So we go ahead, erecting barriers against the people who have erected barriers against us, precisely as the ancients used to besiege a walled city by raising a wall of their own around it, and trying to make their wall the higher and the stronger.

In the last few days I have talked to experts on the subject of the sugar tariff. I have asked half a dozen of them to write for me a draft of what they think would be the ideal sugar schedule. Everybody begs to be excused. They begin by demanding to know my point of view. Do I want free sugar, or do I want to maintain a revenue duty on sugar, or do I propose to continue protection to the Louisiana cane-sugar and the Western beet-sugar industry? Of course, an answer to those and various other questions that can be asked in connection with the sugar schedule amounts to dictating the terms of the schedule. I have been trying to induce these various experts to present their own policies and then formulate them in the language of a proper schedule for administrative purposes.

### Come on With Your Brick Bats

But every time it comes back to the original question of whether we want and ought to have a protective schedule or a free trade shedule. If we decide in favor of a protective schedule, the political objection is urged that a protective schedule will not particularly reduce either the cost of sugar to the consumer or the power of the sugar trust to control the market. The country insists that "something ought to be done" to the sugar trust. Also, it thinks sugar ought to be cheaper. The Democrats who are responsible for the new revision realize that if they don't either make sugar cheaper, or smash the sugar trust, or both, they will be accused of failure.

So we turn to the other side of it, and propose free sugar; to let in the beet-sugar of Germany, or the cane-sugar of Java, raw or refined, without any duty whatever. There is no doubt that this would reduce the cost of sugar, but it would close many of the beet-sugar factories that are scattered throughout some twenty states, and it would have a depressing if not a ruinous effect on the cane-sugar industry of Louisiana. Consequently, there arises the question whether it is better to go on paying more for sugar in order that these industries may live, or to destroy these industries, in order that we may have cheaper sugar.

Now, come on with your brick-bats. I believe in free sugar. I don't believe that the sugar industries of this country are worth the price we pay for them. The average American consumes eighty-two and one fourth pounds of sugar per year. He paid for it four and three fourths cents per pound in 1909. That is to say, the national sugar bill, quoting average wholesale prices, was $345,950,000, or about twenty dollars per family of five.

### What the Sugar Tariff Costs Us

In the same year the average cost of sugar in foreign countries amounted to but two and three tenths cents per pound. That is to say, the sugar for which we paid $345,950,000, actually cost, on the basis of prices in foreign markets, only $167,449,000. The difference, $178,501,000, represents the tariff duties collected at our ports, plus the profits of the sugar trust and of merchants.

But it is notorious that dealers in sugar, after it leaves the refiner, make practically no profit. The average grocer, at wholesale or at retail, will tell you truthfully that he "can't make anything on sugar." We must, therefore, assume that the tariff and the sugar trust are jointly responsible for imposing this $178,501,000 of additional burden upon us. Turning to the statistics of revenue collected on importations of sugar, we find that during the year under consideration duties on sugar amounted to $56,213,000. The government got that, and, therefore, we must deduct it from the $178,501,000. This leaves, however, $122,288,000 of additional burden on the sugar-consuming public.

Most of the sugar, however, is imported raw, and sold only after being refined. The sugar trust does most of the refining, and so we must deduct its expense in doing this. A liberal estimate—and it is very liberal, according to the best refining authorities—places the cost of refining at one fourth of a cent per pound. At the outside this would justify a total deduction of about $18,000,000 for the cost of refining. So, after deducting $56,000,000 on account of tariff duties and $18,000,000 for refining, we still have left about $104,000,000 which seems to represent the real expense to the nation of maintaining the present relation between sugar and the tariff.

We produce in this country between one fifth and one fourth of the total amount of sugar we consume. This home production is almost equally divided between beet and cane sugar.

### The Situation in a Nut Shell

The protective tariff argument in favor of a high duty is that it enables us to develop a home industry. It appears that in order to produce one fourth of our annual supply of sugar, which would cost us, if we bought it abroad, about $40,000,000, we are subjecting ourselves to a tariff system which adds $104,000,000 a year to our total sugar bill. Or, to put it in another way, we are paying this $104,000,000 in excessive costs of our sugar supply, in order that we may make for ourselves about $70,000,000 worth of sugar, at current wholesale prices. In other words, we could pay the Louisiana cane-sugar growers and the Western beet-sugar growers the market price for all they turn out, retire them from the business, give them the money as a donation, get absolutely nothing from them, and then save about $35,000,000 a year.

There is the situation as to sugar, stated in the simplest terms. Is the industry worth what we are paying for it? I don't believe it is, and I doubt gravely if it ever will be. Sugar is a natural product of the tropics. So good an authority as Professor Sumner of Yale, who understood the economics of sugar better than any other American, declared that if tariffs and bounties and reciprocity arrangements and treaties and special privileges were all done away with, and if the people of the temperate zone would not insist on the effort to raise sugar, the world ought to get its sugar served on its breakfast-table at something like one and one half cents per pound. Instead of that, we Americans are paying four and three fourths cents at wholesale.

Being human, people who have investments in sugar manufactures want their investments taken care of, and expect the tariff to do it. When you set about to get your votes for the free sugar proposition, you find that a lot of people are interested in domestic sugar, and they all write letters to their senators and congressmen, insisting that the tariff must not be taken off. The senators and congressmen know that the sugar industry in Louisiana, Colorado, Utah, California, Michigan and other states is of very considerable importance, and they read these letters with profound respect.

### Trade With Our Colonies

Here is another complicating condition which must be considered. Most of the raw sugar imported is of the grade which pays duty of $1.90 per hundred. That is, it would pay $1.90 per hundred if it paid the full duty. But under the reciprocity treaty with Cuba, Cuban sugar is let in at $1.52. At the same time, the same grade from Porto Rico, the Hawaiian and Philippine Islands, is admitted free, so that we find about half the country's annual sugar supply comes from Cuba at $1.52 per hundred; about one eighth of the supply comes from Hawaii, free of all duty; nearly as much more comes from Porto Rico, duty free, and in a few years more about eight per cent. of the national requirement will come from the Philippines, also free from duty. Finally, rather more than one fourth of the supply is made at home and, of course, pays no duty.

But when all these sources are exhausted, the country still needs more sugar, and gets it from Java, Colombia, Demerara, Germany and numerous other countries, paying upon it the full duty of $1.90 per hundred.

All this sugar goes into the hoppers of the trust refineries and is refined. When it comes out, whether it paid $1.90, or $1.52, or nothing at all, to get into our ports, it must all sell in the same market, and at the same price. Now, if the refiner pays a duty of $1.90 on Java sugar, and still is able to sell it at a profit, it seems reasonably obvious that on his Porto Rico sugar, which pays no duty at all, he must make a profit very much larger. That is exactly what he does. Of course, the Cuban planter is able to get a little more for his raw sugar, because it is admitted at a lower duty; likewise, the Porto Rican and Hawaiian planters get a little more for their sugar, because it is admitted duty free; but, none the less, the tendency is to hold up the entire supply for the great American market to that figure which represents a profit on the comparatively small importation which pays the full duty of $1.90 per hundred.

If you propose to let in all the sugar at a uniform duty, there is immediate protest that our colonies ought to be given a measure of preference. If you propose to let it all in free, you are told first that you deprive the colonies of their preference, secondly, that you deprive the domestic industry of its protection and, finally, that you are taking away from the government the revenue which it has heretofore derived from sugar.

### Free Sugar is the Solution

In that case, what would you do about it? My own answer to that question is that all sugar ought to be entered free, and that a bounty ought to be paid to the producers of domestic cane and beet sugar, so as to prevent the confiscation of their investment. This bounty could be tapered off during a period of years, so that in time the domestic business could adjust itself to the new condition, or investment could be gradually withdrawn without precipitous loss. But if you think it is easy to get Congress to adopt such an idea, come down and ask it to do so. You will discover, as I have, that to make just one single schedule over in such fashion as to protect existing American investments, and at the same time give the consumer a fair chance, is next to impossible.

Multiply the difficulties which involve this one schedule by the total tariff situation, and you will have some conception of what a general revision means. Impossibility multiplied by infinity results in chaos.

# The Room of Many Shadows

## The Great Mystery Surrounding Four Oaks Tavern

By Anna Katharine Green

Author of "The Millionaire Baby," "The Leavenworth Case," "The Mayor's Wife," Etc.

Part II.

He could hear his heart beat. He made one determined effort. Drawing back, he threw his whole weight against the panels, uttering loud cries for help. The effort was useless. No yielding in the door, no rush to his assistance from without. Aroused now to his danger—reading the signs of the broken cord and hampered lock only too well—he desisted from his vain attempts and turned desperately toward the window. Though it might be impossible to hold up the sash and crawl under it at the same time, his only hope of exit lay there, as well as his only means of surviving the inroad of smoke which was fast becoming unendurable. He would break the sash and seek escape that way. They had doomed him to death, but he could climb roofs like a cat. Catching up the chair, he advanced toward the window.

But before reaching it he paused. It was not only he they sought to destroy, but the room. There was evidence of crime in the room. What was to be done? How could he save the room, and, by these means, save himself and her? A single glance about assured him that he could not save it. The boards under his feet were hot. Glints of yellow light streaking through the shutters showed that the lower story had already burst into flame. He could not save the room, it must go and with it every clue to the problem which was agitating him. And he must go. His eyeballs were smarting, his head was growing dizzy, he must go, but—he had staggered over to the wall. He was no longer sure of his feet, and was about to make use of its support to aid him in reaching the window, when his eyes fell on the spot from which he had pecled the paper, and he saw something there which brought him to a standstill and filled him with fresh courage.

Dropping the chair which he still held, he fumbled for his knife, found it, made a dash at that wall and for a few frenzied moments worked, hacked, pulled and tore at the plaster till he had off a piece which he thrust into his pocket. Then he groped for the chair again, and stooping as low as he could, made for the window and threw it with all his force against the panes. They crashed and the air came rushing in, reviving him enough for the second attempt. This not only smashed the pane, but loosened the shutters, and in one instant two sights burst upon his view—the face of a man in an upper window of the adjoining barn and the sudden swooping up from below of a column of deadly smoke which seemed to cut off all hope of his saving himself by the means he had calculated on. Yet no other way offered. This was the only road, threatening as it looked, to possible safety for himself and her. He would take it, and if he succumbed in the effort, it should be with a final thought of her who was fast becoming an integral part of his own being.

"'Do you see these bits from a papered wall?' he asked. 'They were torn from that of No. 7—come closer; you may look at them, but keep your fingers off'"

Meanwhile he had mounted to the sill and taken another outward look. This room, as I have already intimated, was in the rear of an extension running back from the center of the main building. It consisted of only two stories, surmounted by a long, slightly-peaked roof. As the ceilings were low in this portion of the house, the gutter of this roof was very near the top of the window. To reach it, was not a difficult feat for one of his strength and agility, and if only the smoke would blow aside— Ah, it is doing so! A sudden change of wind had come to his rescue, and for the moment the way is clear for him to work himself out and up onto the ledge above. But once there, horror makes him weak again. A window, high up in the main building overlooking the extension had come in sight, and in it sways a frantic woman ready to throw herself out. She screamed as he measured with his eye the height of that window from the sloping roof and thence to the ground, and he recognized the voice. It was the same he had heard before, but it was not *hers*. It was one of the maids—it was *the* maid Hester. Was she locked in, too? What deviltry, and, ah! what a confession of guilt on the part of the vile man who had planned this abominable end for the two persons whose evidence he dreaded. Helpless with horror, he became a man again in his indignation. He would fight not only for his own life, but for this woman's. Miss Williams was doubtless safe. Yet he wished he were sure of it. He could work with so much better heart. Her window was not visible from where he crouched. It was on the other side of the house. If she screamed, he would not be able to hear her. He must trust her to Providence. But his dream! his dream. The power of it was still upon him; a forerunner of fate, a picture possibly of her doom. The hesitation which this awful thought caused him warned him that not in this way could he make himself effective. The woman he saw stood in need of his help, and to her he must make his way. The bustle which now took place in the yards beneath, the sudden shouts and the hurried throwing up of windows all over the house showed that the alarm had now become general. Another moment and the appalling cry of fire! fire! rang from end to end of the threatened building.

"She will hear, she will wake now," he thought, with his whole heart pulling him her way. But he did not desist from his intention or drop his eyes from the distraught figure entrapped between a locked door and a fall of thirty feet. He could reach her, if he kept his nerve. A slow but steady hitch along the gutter was bringing him nearer every instant. Would she see him and take courage? Would a shout attract her? The air was full of cries as the yards filled with escaping figures, but he would attempt it at the first lull—now—while her head was turned his way. Did she hear him? Yes. She is looking at him.

"Don't jump," he cried. "Tie your sheet to the bedpost. Tie it strong and fasten the other to it and throw down the end. I will be here to catch it. Then you must come down hand over hand."

She threw up her arms, stared down at him in mortal terror; then, as the whole air grew lurid, nodded and tottered back. His own post was becoming perilous. The fire had not yet reached the roof, but it was rapidly undermining its supports. Would he have to jump to the ground in his own despite? Was it his duty to wait for this girl, possibly already overcome by her fears and lying insensible? Yes; so long as he could hold out against the heat, it was his duty, but— Ah! what was that? Someone was shouting to him. He had been seen at last, and men, half-clad but eager, were rushing up the yard with a ladder. He could see their faces. How they glared in the red light. There was help and determination in them, and perhaps when he saw the promise of this support, it would give nerve to her fingers and—

But it was not to be. As he watched their eager approach, he saw them stop, look back, swerve and rush around the corner of the house. Someone had directed them elsewhere. He could see the pointing hand, the baleful face. Stetson had realized his own danger in this prospect of Rodney's escape, and had intervened to prevent it. It was a murderer's natural impulse, and did not surprise him, but it added another element of danger to his position, and if this woman delayed much longer—but she is coming; a blanket is thrown out, then a dangling end of cloth appears above the sill. It descends. Another moment he has crawled up the roof to the ridge and grasped it.

"Slowly now!" he shouts. "I will guide you." She has drawn it into her hands; now she is on the sill, and is working herself off. He clutched his end firmly. The strain becomes greater, he feels her weight, she is slipping down, down. Her hands strike a knot; the jerk almost throws him off his balance. She looks down, sees the approaching peril, and hastens her descent. He is all astrain, with heart and hand nerved for the awful possibilities of the coming moments when—ping! Something goes whistling by his ear, which for the instant sets his hair bristling on his head, and almost paralyzes every muscle. A bullet! The flame is not threatening enough, evidently! someone is actually shooting at him from the dark.

Chapter III.

Well! death which comes one way cannot come another, and a bullet is more merciful than flame. The thought steadies Rodney; besides he has nothing to do with what is taking place behind his back. His duty is here, to guide and support this rapidly-descending figure now almost within his reach. And he fulfils this duty, though that deadly "ping" is followed by another, and his starting eyes behold the hole made by the missile in the clap-board just before him.

She is down. They stand toppling together on the slippery ridge with no support but the rapidly heating wall down which she had come. On one side leap the flames; beneath the other crouches their secret enemy. They cannot meet the first and live; needs must they face the latter? Bullets do not always strike the mark. Besides, there are friends as well as enemies in the yard on this side. He can hear their encouraging cries. He will toss down the blanket; perhaps there will be hands to hold it and so break her fall, if not his.

He saw her land in safety amid half a dozen upstretched arms. Then he prepared to follow her, but felt his courage fail and his strength ooze without knowing the cause. Had a bullet struck him? He did not feel it. He was conscious of the heat, but of no other suffering; yet his limbs lacked life, and it no longer seemed a possible feat to twist himself about so as to fall easily from the gutter.

"Come on! Come on!" rose in yells from below, but there was no movement in him.

"We can't wait. The wall will fall," rose affrightedly from below. But he simply clung and the doom of flame and collapsing timbers was rushing mercilessly upon him when, in the glare which lit up the whole dreadful scene, there rose upon his fainting eyes a sight which drove the blood back into his brain and restored his strength and purpose. It was a woman's face, turned his way from the crowd below, with all the terror of a woman's bleeding heart behind it. Not the woman he had just saved, but she, *she* with whose fate his whole being had been full even while engaged in the other's rescue! The joy, the hope, which came with that look of hers made struggle with his lethargy. Raising himself on one elbow, he slid his feet over the gutter, and with a frantic catch at its frail support, hung for one instant suspended, then dropped softly into the blanket which a dozen eager hands held out for him.

As he did so, a single gasping cry went up from the hushed throng. He knew the voice. His rescue had relieved one heart. His own beat tumultuously and the blood throbbed in his veins as he realized this.

The next thing he remembered he was standing far from the collapsing building, with a dozen men and boys grouped about him. A woman at his feet was clasping his knees in thankfulness, another sinking in a faint at the edge of the shadow, but he saw neither, for the blood was streaming over his eyes from a wound not yet accounted for, and as he felt the burning flow, he realized a fresh duty.

"Where is Stetson? He made this hole in my forehead. He's a murderer and a thief, and I order you all in the name of the law to assist me in arresting him.

"Look!" he shouted, "do you see that black spot? Wait till the smoke blows aside. There! now! the spot just below the dangling sheet. It's a bullet-hole. It was made while I crouched there. Stetson held the gun. He had his reasons for hindering our escape. The girl can tell you—"

"Yes, yes," rose up from the ground at his feet. "Stetson is a wicked man. He knew that I knew it and he locked my door when he saw the flames coming. I'm willing to tell now. I was afraid before."

They stared at her with all the wonder of uncomprehending minds as she rose with a resolute air to confront them; but as the full meaning of her words penetrated their benumbed brains, slowly, man by man, they crept away to peer about in the barns, and among the clustering shadows for the man who had been thus denounced. To Miss Williams' eyes, just struggling back to sight and hearing from the nethermost depths of unconsciousness, it looked like the swirling flight of spirits lost in the vortex of hell. The next moment she realized her mistake. A kindly voice was in her ear, a kindly hand was pressing a half-burned blanket about her.

"Don't stare so," the voice said. "It is only people routing out Stetson. They say he set fire to the tavern himself, to hide his wickedness and kill the one man who knew about it. I know that he locked me in because I— Oh, see! they've got him! and with a gun in his hand!"

The friendly hand fell; both women started upright, panting with terror and excitement. Then one of them drew back, crying in a tone of sudden anguish, "Why, no! It's Jim, Jim!"

[CONTINUED ON PAGE 20]

# Pass It Along

## By Rev. J. M. Long

I REMEMBER very well a warm summer afternoon when a whole row of us boys were sitting on the long back seat of the school-room to recite in class and I received a sudden nudge in the side from my neighbor who, boylike, had taken advantage of the teacher's momentary absence.

"What's that for?" I demanded.

"Pass it along!" he whispered.

I don't remember whether I did—I hope I did not—but whenever I think of the incident it teaches me this lesson: *Don't* "pass along" the unkind thumps the world gives you. Some parody the Golden Rule thus: "Do unto others as they would do unto you, if they got the chance;" or, "*Do* the other man before he can *do* you." But that is the wrong spirit.

### Don't Tell Your Troubles

Most men are taking a course in the University of Hard Knocks, otherwise called "experience," and they are the better for it; but they don't need your "knocks" in addition to their own. "Go bury thy sorrow, the world hath its own." You have no right to impose your "moods" on anybody. Let the unpleasant things of life stop with you, and don't burden other people with them. You can do yourself more harm by nursing a supposed injury than the person did who inflicted it. And it is certainly wrong and unchristian to "take it out of somebody else."

Josh Billings compares the man who is sour over his misfortunes to one who has the skin of the hornet that stung him stuffed and set up on the mantel where he can shake his fist at it every day. Better let the matter drop and try to forget it.

### A Kindness is Never Forgotten

But "pass it along" has a better application, a positive one. Let me illustrate this also by a boyish incident. I met one day a pleasant-looking old gentleman walking along with his hands behind him. As he passed me he held out one of them containing a big Bartlett pear—it seemed to me it was the biggest and most tempting one I ever saw. He said not a word, but only smiled as he offered the pear. Of course, I took it, thanking him for it. I had never seen him before, and never met him again, but never forgot the kind act.

Years after, I happened to be walking along that same street with a basket of big red Williams apples, which were my own, when around the corner came a forlorn, ragged little fellow. The incident I have related flashed into my mind, and I did exactly what you would have done, held out to him the biggest apple in the basket, without a word, but only a smile. He could not believe it was for him at first, but finally took it with much satisfaction and went on his way eating it and enjoying it as much as I had the Bartlett pear.

### Encouragement Helps Toward Success

We never forget a kindness done us, especially from an unexpected source and when we greatly needed it. Daniel Webster says that when he was a green country boy just starting in to read law in a city office, a kindly old gentleman came up to him one day and, shaking hands with him, remarked that he knew his father, and was glad he was starting out in life with a purpose, and believed he would succeed. Although in the years of his splendid achievements afterward Webster received the congratulatory handshakes of his countrymen many, many times, he said he could still feel the kindly grasp of that friendly hand that came when he most needed encouragement.

And Dwight L. Moody tells the story of an old gentleman in his native town who gave him, as he did every new boy he met, a big old-fashioned cent and a good word of advice with his best wishes. Mr. Moody said after that he never saw a cent that looked as big as that one, and the kind act helped to inspire him to befriend hundreds of young people.

Rev. Robert Burdette says: "When you get through pumping, lave the handle!"—let the next weary traveler have a chance to quench his thirst.

### So—"Pass It Along"

Pass on the good things, the happy experiences that come to you—never the unfortunate things. By the time we have come to realize our debt of gratitude, too often our benefactor has passed away and we cannot repay him. But let us do as he did—pass along all the good we can to others. The two boyhood incidents I have related have preached me a good sermon by which I have tried to profit, and I "pass it along" to others.

# Darkest Just Before Dawn

## By Orin Edson Crooker

THE darkest hour of the night is said to be that which comes just before dawn. When John Wesley Powell, the explorer, was endeavoring to make the passage of the cañon of the Colorado in 1869—a feat never before attempted—he and his companions underwent great hardships and dangers.

At last they reached a point where to go on seemed certain death. In face of the threatened danger three of the party decided to go no further and attempted to make their way out of the cañon, only to be killed by Indians a few days later.

Powell and five others, however, pushed on in two boats which were swamped almost as soon as they entered the angry waters. The explorers had anticipated this and planned to ride through the rapids by clinging to the boats. This was done, and all six succeeded in reaching the placid waters of the river below the falls. The very next day the river flowed peacefully out of the cañon, bearing the expedition to success.

How often in life we stop just short of success for no other reason than that our courage is overcome by the apparent impossibility of the task before us! To have pressed on further would have meant victory. Instead, we become discouraged on the very threshold of achievement.

### Patience is a Virtue

It sometimes happens in the midst of a great anxiety that no ray of hope or encouragement breaks across our pathway. There seems absolutely nothing to give us cheer or increase our strength. We feel as though defeat had marked us for its own and as though life held only bitterness in the days to come. Later, as we look back, we can see that times like these were always followed by a rift in the clouds and the return of sunshine.

It needs only a stout heart and a patient spirit to weather such times successfully. "There never was a night so dark as to have hindered the coming day, nor a storm so furious or dreadful as to prevent the return of sunshine and a cloudless sky."

Therefore, when everything seems to be at its worst, begin to expect something better. And when the darkest hour of the night throws its mantle about you begin to watch for the light of day in the east.


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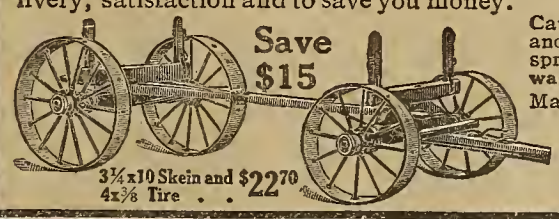

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# Farming Taught in Public Schools

## A New Educational Movement in Wake County, North Carolina

By Fred A. Olds

Prof. Zebulon Vance Judd, Superintendent Wake County Public Schools, North Carolina

IT HAS remained for Zebulon Vance Judd, superintendent of public schools in Wake County, North Carolina, to develop and carry to success something never before done in the United States, according to the widely-known Dr. S. A. Knapp of the United States Agricultural Department. In the early spring of 1907 Professor Judd conceived the idea of establishing farms at rural public schools to be worked by students and members of their families and at once proceeded to carry it out at Holly Springs, where ten acres had been bought for a school-site, on which a $7,200 brick building had been erected, the Woman's Betterment Association, of which Miss Clyde Holt was the head, having pledged $500. Professor Judd called on Miss Holt and suggested that if the women of the association would cultivate two acres of this school land, it would be something entirely new and would cause the boys and girls to place a far higher premium on labor than ever before, and, in addition to this, would bring in a considerable fund to aid in paying the obligations assumed by the association. Miss Holt lost no time in acting, and the very next day informed Professor Judd that she had called the association together and that every member was delighted with the plan.

So the beginning was made and two acres were planted in cotton. The lighter work—planting, cultivating and gathering this crop—was done by the women and children, while the men did the heavy work. No charge was made for anything. When the picking was completed, it was found that about a bale to the acre had been produced and that the net profit was $132.

### Wake County Wakes Up Its Neighbors

The next year corn was planted on this school farm. The result of the visits to this farm by men, women and children from other communities and countries was shown by the establishment last year of ten more farms on school property. On six of these farms cotton was planted, eleven acres in all, and the net profit was $746. The system had made itself very attractive to the rural mind, both as to children and adults. The Turner school planted two acres in tobacco, the crop amounting to 1,562 pounds, which sold for $313.50. One school planted two acres in wheat and made twenty-one bushels, which sold for $28. One sold its corn crop grown on two acres for $64.50.

Everybody Works—Including Father

These farms were worked by what Professor Judd very delightfully terms "school farm-working bees." In each case a person known as a farm superintendent was chosen by the members of the Betterment Association, the superintendent notifying the men, women and children when the crop was to be worked. Everyone has always been prompt in turning out to work, and generally finished it in from two to three hours. One of the customs, which has become extremely popular, is the giving of a barbecue dinner by the whole neighborhood. The gatherings have been very merry ones, indeed, and have added immensely to the charm of rural life. On the eleven farms 1,207 persons participated in the work. It has become, in fact, a social movement, and the young people—the pupils of the school—have come to look forward to these gatherings, which so happily combine work and pleasure, with as much enthusiasm as they do a big annual picnic.

### Three Good Ideas and Their Results

There were no shirkers; nor could it ever be said that "everybody worked but father." For he was right there.

Professor Judd said that he had three ideas in his mind in launching this unique movement: First, to make money, all to be used in supplementing the school fund for equipment, lengthening of terms, etc. Secondly, to afford an opportunity to make the teaching of agriculture in the rural public schools entirely practical and to illustrate how pleasant farm work can be under just and proper conditions, to make the school farm literally the experiment station of the rural schools. If the teaching of agriculture has not been popular, it is because of the lack of this very practical feature, for very many people in the country have ridiculed what they termed "book-teaching of agriculture." Thirdly, to afford rural communities opportunities for gatherings and other features of school-life, which bring the young people together and at the same time give them a chance to develop the social side of life and give dignity and charm to the chief of all the avocations in this world—namely, farming—and to make the school-house the social center of the community. Every result desired has been brought about, and, as Professor Judd said to me, "In every neighborhood where there is a good school-farm you may be sure that bickerings among the people in that territory are ended and there is an agreeable community." Three years of these school-farms have proved absolutely the truth of this statement.

### Popularity is the Best Proof

The children want the school-farms and the older people are in sympathy with the idea. A pleasant feature has been the very great encouragement of the movement by citizens of Raleigh, and other points in the county, in giving prizes worth $250, while the fertilizer companies have contributed some fourteen thousand pounds and have shown keen interest in these farms. The State Agricultural Society has offered special prizes amounting to $50, and for these the competition has been very keen indeed. Last year the total proceeds of the sale of products of the eleven farms reached the handsome figure of $1,168, which is very gratifying. Every cent of this has gone to the schools. On seven of the more successful of these farms of two acres each the proceeds have averaged $152. The women of the county have shown their interest in these farms by working on them and promoting the gatherings of the people to do the work, and the rivalry is very keen indeed. The United States Agricultural Department has taken special notice of the plan, and the State Agricultural Department shows a very generous interest in the movement.

One of the best-known educators in the country is James Y. Joyner, North Carolina's Superintendent of Public Instruction, who in barely ten years has doubled the educational facilities in this state. Just now Mr. Joyner is deeply interested in the newly inaugurated movement for what are to be known as farm-schools, and he has presented this matter most powerfully to the Farmers' Union, the great organization of agriculturists in this state and others in the South, it having taken the place occupied in years past by the Grange and the Farmers' Alliance. The annual meeting of the Farmers' Union was held at the state agricultural and mechanical college at Raleigh, and it gave most hearty indorsement to the plan, Mr. Joyner, recently retired from the presidency of the National Educational Association, becoming one of its executive staff. When I talked with him regarding the new line of school instruction he said: "It is going to provide precisely the right sort of education for farm-life for boys and girls."

### The South an Excellent Seed-Bed for Growth of School-Farm Idea

"As a matter of fact, we need an interest in agricultural education all over the country, and we are taking the right steps to secure and hold it. The farmers are aware of the merits of the school-farm idea, which is a splendid thing. My own idea is to put these farm-life schools through first. It is the plan to have them at the leading high school in each county, and they will be followed by practical farming at such schools, where actual crops will be cultivated in the most advanced and practical way. The farmers are enthusiastic, and well they may be. The South will make a special response to the call we have made for the establishment of such schools. Now, what is the South? It is a section where the farming population is eighty per cent. of the whole. In a democracy such as ours eighty-two per cent. may truly be said to be the people. In the County of Wake, North Carolina, there are actually school-farms, but these have not been arranged for elsewhere, so far as I am aware. As I have said, such farms will follow the system of farm-life schools."

Surely Professor Judd deserves great credit for the good work that he has done. From the very start the parents have shown their appreciation and willingness to coöperate by pitching in and helping when the crops were ready to handle. And the children have been inspired by this coöperation on the part of the parents. Once the young folks are made to feel they are doing an important work in this big, busy world, and are made to realize the wholesomeness of farm-life, won't the old problem of keeping the boys and girls on the farm be partly solved? It's at least one of the first steps and a big step, too, in the right direction.

"School-Grown" Cotton Going to Market

## *The Room of Many Shadows*

[CONTINUED FROM PAGE 18]

Daybreak! and with it Doctor Gray who at the first alarm had ridden out post-haste without waiting to collect his jury. He looked about among the half-clad, shivering men and women peering from the barns and stables where they had taken refuge, till his eyes rested on Rodney.

"Well!" he cried, as the other quickly approached him. "What's this? A fire with you in the house?"

"A fire because I was in the house. They evidently felt obliged to get rid of me somehow. When they found I was not like to perish in the flames they resorted to shooting. I believe that my forehead shows where one bullet passed. Jim's aim might be improved."

"Jim? Did he fire at you?"

"Yes, while I was on the roof engaged in rescuing one of the women."

"The miserable cur! You arrested him, of course, as soon as you could lay your hands on him?"

"Yes. He's back of me in this outhouse."

"And Stetson?"

"He's missing."

"And Mrs. Stetson?"

"Missing, too. They are the only persons unaccounted for."

"Lost in the fire?"

"We don't think so. He was the incendiary and she, undoubtedly, his accomplice. They would certainly look out for themselves. Doctor Gray, it was not for insurance money they fired the place; it was to cover up a crime."

"So you still hold to that idea."

Rodney in a few graphic words related the night's occurrences and the conclusions they had forced upon him. Doctor Gray listened and seemed impressed at last, especially by one point.

"You saw Stetson," he repeated; "saw his face distinctly looking toward your room from one of the stable windows?"

"I can swear to it. I even caught his expression. It was malignant in the extreme."

"Which window was it?"

Rodney pointed it out.

"You have been there? Searched the room and the stable?"

"Thoroughly, just as soon as it was light enough to see."

"And found?"

"Nothing; not even a clue."

"The man is lying dead in that heap. She, too, perhaps. We'll have to put the screws on Jim. Show me the rascal."

"He's in a most careless mood. *He* doesn't think his master and mistress perished in the fire."

"Careless, eh? Well, we'll see."

But a few minutes later when he came to confront the clerk he had his doubts as to the task before him being quite so easy as his former experience had led him to expect. Save a slight nervous trembling of limb and shoulder—surely not unnatural after such a night—Jim bore himself with very much the same indifferent ease he had shown the day before.

Doctor Gray surveyed him with becoming sternness.

"At what time did this fire start?" he asked.

"Somewhere about one. I don't carry a watch, so I don't know the exact time."

"The exact time isn't necessary. Near one answers well enough. How came you to be completely dressed at near one in a country tavern like this?"

"I was on watch. There was death in the house."

"Then you were in the house?"

"Yes." His tongue faltered, but not his gaze; that was as direct as ever. "I was in the house, but not at the moment the fire started. I had gone to the stable to get a newspaper. My room is in the stable, the little one high in the cock-loft. I did not find the paper at once and when I did I stopped to read a few lines. I'm a slow reader, and by the time I was ready to cross back to the house, smoke was pouring out of the rear windows, and I stopped short, horrified! I lost my head like a fool. I'm not very proud of it. You see, I've never lived anywhere else but in that house, and to see it on fire was more than my nerve could stand. You wouldn't think it to look at these muscles."

"Where did you leave Mr. Stetson," demanded the coroner, "when you went to the cock-loft?"

"In the house."

"Asleep?"

"No, he was making up his accounts."

"In the office?"

"Yes."

"And that was where you left him?"

"Yes, it was."

"How came he, then, to be looking out of your window just before the fire broke out?"

"He?" Jim's jaw fell and his enormous shoulders drooped; but only for a moment. With something between a hitch and a shrug, he drew himself upright and with some slight display of temper cried out, "Who says he was there?"

The coroner answered him. "The man behind you. He saw him."

Jim's hand closed in a nervous grip. Had the trigger been against his finger at that moment it would doubtless have been snapped with some satisfaction, as the barrel had been pointing at Rodney.

"Saw him distinctly," the coroner repeated. "Mr. Stetson's face is not one to be mistaken."

"If he saw him," retorted Jim, with unexpected cunning, "then the flames had got a start. One don't see in the dark. They hadn't got much of a start when I left. So he must have gone up to my room after I came down."

"It was before the alarm was given: before Mr. Rodney here had crawled out of his room window in No. 7."

"I can't help that, sir. It was after I left

[CONTINUED ON PAGE 25]

# May-Time Frolics

By Mary Dawson

THERE is something about the very atmosphere of May that inspires merry-makings and which buds out anew each year so that the May-time frolics of our ancestors may be said to have come down to us in an unbroken line, only with modifications of the sports themselves.

### A Flower Party

A party with a floral motive is always appropriate to the month of flowers and can be made very original and delightful. Invitations can be conventional notes if time is limited, but it adds to the fun of the affair if they are written on flower shapes cut from a sheet of white cardboard. Distinctive outlines such as those of the daisy, pansy and wild rose are easiest to cut and most effective.

Of course, parlor or porch, or both, could be trimmed with wild flowers and branches of fruit-trees, dogwood or pussy-willow. Vases are not necessary, as the flowering boughs are never more artistic than when arranged in ordinary crocks of gray or red earthenware. For the corners of the room, to help out, you can use deep pails filled with water, the tinny part concealed by green leaves, moss and vines.

I wonder if all girls know what pretty temporary hanging baskets can be made from ordinary pasteboard boxes. It is only needful to varnish the box with gilt or silver paint, or to color it green, fill it with tissue-paper flowers, depend with streamers of tissue paper (cut like ribbon) from the ceiling or roof of the porch and the effect will be found charming. The lids, if at all deep, will make other baskets.

### Flower Games

To carry out the idea of the party all the games played are in some way founded on flowers. There are so many good flower games that the hostess should have no difficulty in making up a program.

### The War of the Roses

is one splendid suggestion. It requires a quantity of home-made tissue-paper roses. These can be very quickly cut and sewed together, as botanical perfection is not a requisite. Another item of the preparation is a palm-leaf fan for each player. To play the game draw two parallel lines with chalk where the players will stand. The company takes sides, the two divisions ranging themselves face to face, each side fully armed with the fans. Each division stands back of one of the chalk lines and the space in between (which should be some two yards wide) is neutral territory. One side has a basket of red roses from which to dip up, their opponents a similar basket of white ones. Lots are drawn to see which side shall begin the game and those to whom the chance falls at a given signal bat their flowers toward the opponents' territory. The opponents wield their fans in an energetic attempt to force the flowers back upon the enemy's lines. This is continued until all the flowers in the volley have fallen to earth, which will usually require several minutes. Each flower that falls in the opponents' territory counts one point for the side throwing it. If it drops in mutual territory it counts nothing, but if forced back into the lines of those who sent it this division loses one point. When the first volley has been disposed of, the second division fires a volley of the opposite color, which is combated in the same way. The side having most points to its credit, when it is decided to discontinue the game, is, of course, the victorious one.

### Stems

If an unwanted seed catalogue can be secured, an exciting game of another order is easily prepared for. To play it, cut away all the flower illustrations, remove the names and clip away the stem from the flower. Mount each stem and flower separately on little squares of thin cardboard. Identify the flowers with numerals, 1, 2, 3, etc., and the stems with alphabetical letters, A, B, C, and so on. Avoid having the numbers and letters correspond, as this would afford too patent a clue. Jumble flowers and stems thoroughly, distribute paper and pencils, and let the players write down the mating stems as they suppose them to be, as C—5, F—9, and so on. The player matching most wins the game.

### Floral Descriptions

Another amusing little flower contest is one where the girl describes a flower to the best of her ability and without mentioning its name, and her partner must draw a design of the unknown bloom, relying upon her description for his points. It is surprising how meager an idea of the actual form the words will convey.

At the end of fifteen minutes the hostess collects the cards with the flower sketches, obtains from each girl the name of the flower she intended by her word picture and writes this above the sketch. All the cards are then tacked up on the wall and players vote for the one they consider cleverest. The picture winning most ballots could involve souvenirs such as pin-cushions or pen-wipers in flower shape for the two persons who worked together to form it.

### The Flower Marriage

A question game called the "Marriage of the Flowers," too, will be found great fun. This can be played while resting after the exertions of some more active contest. It consists of a series of riddles, the answers to which are names of flowers wild or of the garden, and which are written together so as to tell a story. A short example will give the idea to those who are unfamiliar with it:

What was his name? Sweet-william.
What was the color of his eyes? Violet.
Whom did he marry? Black-eyed Susan.
What confectionery did he take her? Peppermint.
What did he say when he proposed to her? Honeydew.
Who were the bridesmaids? Lily and Pansy.
Who performed the ceremony? Jack-in-the-pulpit.
What were heard to chime sweetly at the ceremony? Canterbury-bells.
What did she wear on her head? Bridal wreath.
How many were present at the marriage ceremony? Phlox.
At what time were they married? Four-o'clock.
When he went away, what did she say to him? Forget-me-not.
With what did they punish their children? Goldenrod.
Was their love enduring? Everlasting.

The story can be carried out to any length desired. It is only necessary to make out as long a list as possible of familiar flowers and write the questions to fit. The numbered riddles are written on cards with blanks opposite, in which the players must write the names of the missing flowers. It is a pretty as well as an interesting game.

### A May-Pole Dance

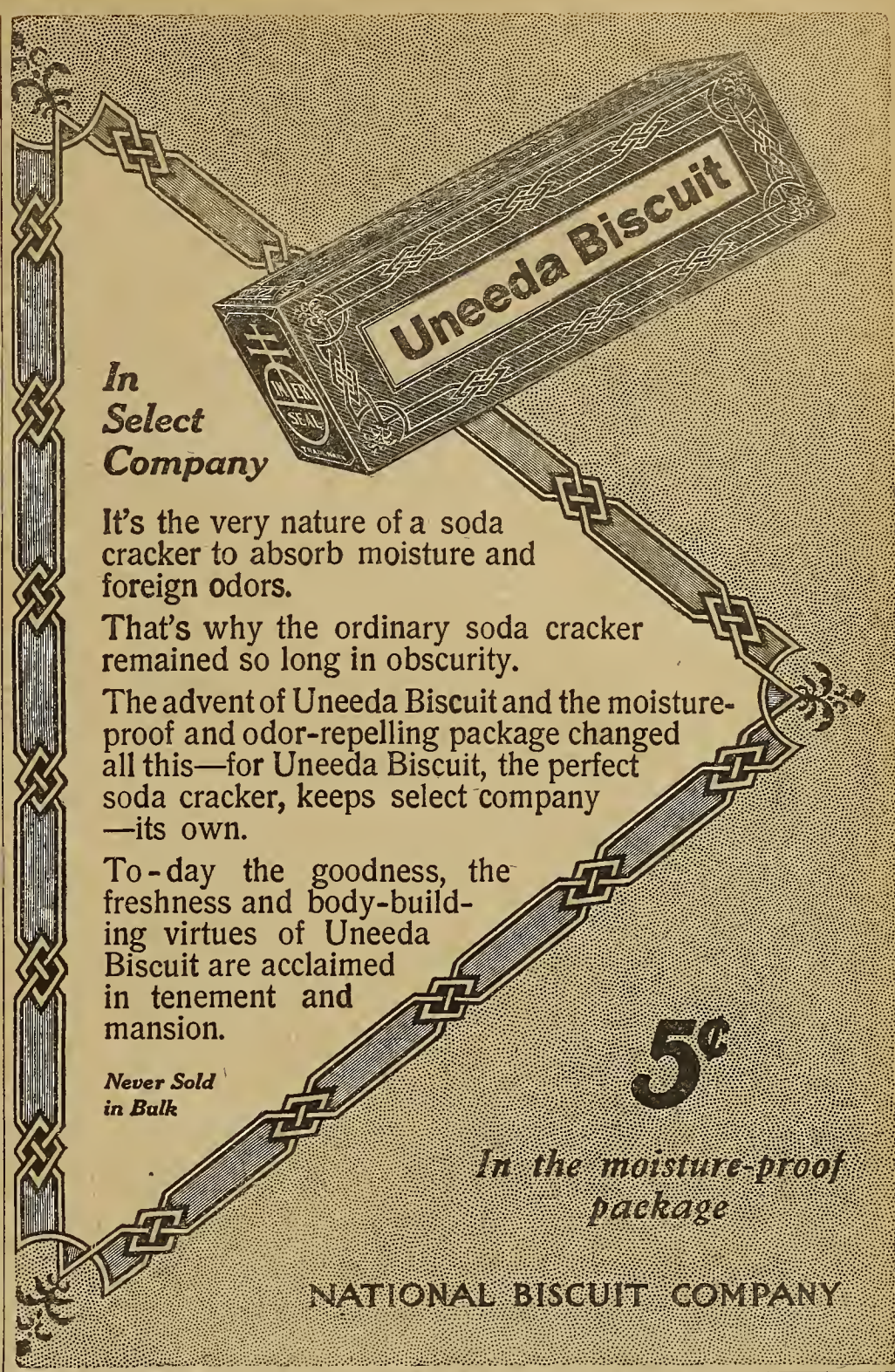
To many revelers a really truly May party is incomplete without the lovely old feature of a dance around the pole and to all such this plan for a specially pretty feature of the kind may be of interest.

Surmount the pole with a large bunch of daisies and buttercups or with tissue-paper flowers, if it must be trimmed long in advance of the festivity, and twine the shaft with ropes of green leaves or with vines. Have the streamers in pairs, two of each color.

Let the girls who will participate draw the day before the frolic slips of paper on which the names of certain wild flowers are written. She who draws the word "clover" must come bringing with her a wreath of clover for her own head and a buttonhole nosegay of the same bloom for her prospective partner. In the same way the girl drawing the word "daisy" or "buttercup" comes with a daisy or buttercup crown, and so on.

The entertainer removes the coronets and boutonnières and lays them aside in a basket lined with damp moss until all players are on the scene. A basket containing the nosegays is then passed among the men, each of whom chooses one according to fancy. When he has chosen, the girl whose crown matches the bouquet dons the former, and they become partners. Partners dance around the pole, holding streamers of the same hue, and at the supper that follows the dance each swain waits upon the fair lady wearing the bloom he chose. If a queen is proclaimed, she wears a white dress and a white wreath. It is a pretty idea for the revelers to carry little baskets filled with flower-petals with which to shower the Queen of the May. The most inexpensive baskets are charming for this purpose if lined and decorated with colored crêpe paper in soft shades, such as pale blue, pink, yellow, or lavender.

Nothing could be more appropriate for the flowery month of May than a May-pole dance, and this idea for one which I have given is both novel and original and can't help but be a success.


# Get a Watch and Fob
## Without Cost

**Boys:** **Here is a chance** to obtain a handsome and useful watch, and a fine leather fob with a gilt metal charm engraved with **your own initial letter** without cost. FARM AND FIRESIDE guarantees you satisfaction.

**DESCRIPTION:** This watch has a handsome nickel case, with open face. It is a stem-wind and a stem-set, just like other high-priced watches. It has a close-fitted snap back. It is only ⅜ inch in thickness. It is a perfect timekeeper, tested and regulated before leaving the factory. It is engraved front and back, and is a watch of which anyone would be proud.

**The Fob** is of handsome black leather with a polished buckle, like illustration, with a rich gilt charm engraved with **your own initial.**

**MOVEMENT:** Regular 16 size. Lantern pinion (smallest made). American lever escapement, polished spring. Weight, complete, with case, 3 ounces. Quick train, 240 beats to the minute. Short wind, runs 30 to 36 hours with one winding.

Every watch is fully guaranteed by the manufacturers and by FARM AND FIRESIDE.

The manufacturers will make all repairs for a year free, as explained on the guarantee.

## How to Get the Watch

You can get this dandy watch and fob very easily. Write a postal-card to the Watch Man. Tell him you want to get this watch and fob without spending one penny. He will be glad to help you get your watch. This is a chance you must not overlook.

Thousands of delighted boys have secured their watches this way with the help of the Watch Man. You can do it, too. Any boy that really wants one can easily get this fine watch. But how will the Watch Man know about you if you don't tell him?

**Write a Postal To-Day to THE WATCH MAN**

**FARM AND FIRESIDE, Springfield, Ohio**

# FIFTY

## Beautiful Post-Cards

Assorted Subjects

— For —

## Farm and Fireside Readers

We have just concluded a big purchase of Post-Cards which enables us to offer our friends an assortment of fifty cards of the very best quality and design, absolutely without cost.

These cards are without doubt the acme of post-card production. They are lithographed in ten colors and the designs are new, original and attractive.

# YOU

## Will Want These Cards

And we want you to have them. The subjects are many and varied, and can be applied to all occasions, such as Birthday Greetings, Best Wishes, Good Luck, etc.

We give you our positive assurance that a finer assortment of Post-Cards cannot be obtained anywhere. These cards are the best in every particular.

# Write To-day

## For Particulars

We will reply immediately telling you how you may obtain this fine assortment of high-colored, high-finished, high-priced Post-Cards without a cent of cost to you.

Write at once. Address

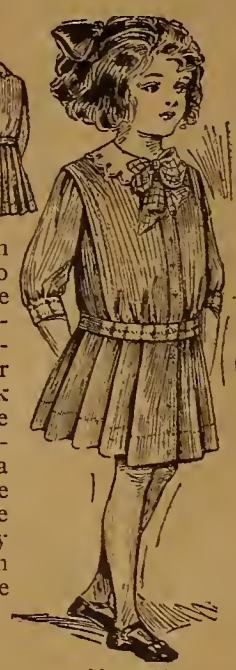
FARM AND FIRESIDE

Post-Card Department

Springfield - - - - Ohio


# Patterns for the Home Dressmaker

THE strictly tailored shirt-waist is always good style straight through the year. It is really the most appropriate waist to wear in the morning with a plain tailored skirt. The model here pictured in pattern No. 1747 is especially trim-looking and will develop well not only in the new cottons and linens, but in pongee and plain silk. The pattern provides for the linen collar. If it is to be embroidered, the work should be done before the collar is attached to the collar-band. The costume waist shown in pattern No. 1755 is an attractive style for one's best waist. It may be made of silk and trimmed with black satin with the yoke and undersleeves of net or embroidery. If it is to be worn, however, with a cloth skirt to a suit, it should be in the same color as the skirt, though it may be in a lighter shade with the trimming only in the dark tone. It is also a good pattern for a summer waist of linen or batiste with the trimmings of dotted swiss.



No. 1760

No. 1761

THREE very attractive and useful gowns for the spring wardrobe are illustrated on this page. The simple dress, patterns No. 1562 and No. 1563, is an excellent costume for morning wear at home because it is so comfortable to work in. It should be made of dark-toned or plaid gingham if it is to be used as a housework dress, while of flowered batiste with embroidery trimming it would make a dainty afternoon dress for warm weather. Another pretty gown for home wear is shown in pattern No. 1424. This is an extremely economical pattern to buy, as both waist and skirt are included and it costs but ten cents. A dress of this style may be made of cashmere, silk or organdie. The third dress is for street wear and may be developed in pongee, linen or a light-weight cloth. It is shown in patterns No. 1735 and No. 1736. Clothes for children are also shown on this page in patterns No. 1760 and No. 1761.

### No. 1760—Girl's Dress Buttoned in Front

Pattern cut for 4, 6, 8, 10 and 12 year sizes. Material required for medium size, or 8 years, five and three fourths yards of twenty-seven-inch material, or four yards of thirty-six-inch material, with one fourth of a yard of plaid, striped or dotted material for trimming

### No. 1761—Child's Rompers—High or Low Neck

Cut for 1, 2, 4 and 6 year sizes. Material required for medium size, or 4 years, four yards of twenty-seven-inch material, or two and seven eighths yards of thirty-six-inch material, with one fourth yard of contrasting material or a dark tone of self-fabric for trimming

### No. 1747—Plain Tailored Shirt-Waist

Cut for 32, 34, 36, 38, 40, 42, 44 and 46 inch bust measures. Material required for medium size, or 36 inch bust, three and one half yards of twenty-seven-inch material, or two yards of thirty-six-inch material

### No. 1424—Empire Dress—High or Low Neck

Cut for 32, 36, 40 and 44 inch bust measures. Material required for 36 inch bust, eleven and three fourths yards of twenty-two-inch material, or seven and one half yards of thirty-six-inch material, with seven eighths of a yard of lace for yoke and undersleeves

### No. 1755—Costume Waist With Broad Collar

Pattern cut for 32, 34, 36, 38 and 40 inch bust measures. Quantity of material required for 36 inch bust, two and three fourths yards of twenty-two-inch material, with one and five eighths yards of all-over lace and one and one half yards of velvet

### No. 1735—Plastron Waist With Guimpe

Cut for 32, 34, 36 and 38 inch bust measures. Material required for 36 inch bust, two and three eighths yards of twenty-two-inch material, or one and five eighths yards of thirty-six-inch material, with three fourths of a yard of velvet and two and five eighths yards of twenty-four-inch material for the guimpe

### No. 1736—Yoke Skirt With Flounce

Cut for 22, 24, 26 and 28 inch waist measures. Length of skirt all around, 41 inches. Material required for medium size, or 26 inch waist, six yards of twenty-two-inch material, or four yards of thirty-six-inch material

### No. 1562—Low-Neck Russian Waist

Pattern cut for 32, 34, 36 and 38 inch bust measures. Material for medium size, or 36 inch bust, two and one fourth yards of twenty-seven-inch material, or one and three fourths yards of thirty-six-inch material

### No. 1563—Five-Gored Skirt

Pattern cut for 22, 24, 26 and 28 inch waist measures. Length of skirt all around, 41 inches. Quantity of material required for medium size, or 26 inch waist, seven yards of twenty-seven-inch material, or four and three fourths yards of thirty-six-inch material. This skirt opens in front at the left side of the front gore

## How to Get the Patterns

If you want clothes that are right in style and yet practical, use the patterns which are illustrated in FARM AND FIRESIDE. These are the famous WOMAN'S HOME COMPANION patterns which we supply at the low price of ten cents each.

So great has been the demand among FARM AND FIRESIDE readers for our WOMAN'S HOME COMPANION patterns that we have established three offices or depots from which these patterns can be obtained, as follows:

Eastern depot: FARM AND FIRESIDE, 381 Fourth Avenue, New York.

Central depot: FARM AND FIRESIDE, Springfield, Ohio.

Western depot: FARM AND FIRESIDE, 1538 California Street, Denver, Colorado.

We suggest that you send your order to the depot that is nearest to you to facilitate the quick delivery of the pattern.

### A Premium Offer

To any FARM AND FIRESIDE reader who sends us one new subscription to FARM AND FIRESIDE with fifty cents for the same, we will give as a premium for the subscription one WOMAN'S HOME COMPANION pattern. To obtain a pattern without cost, send the subscription to FARM AND FIRESIDE, Springfield, Ohio.

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# Our Puzzle School

Conducted by Sam Loyd

## A Puzzling Treatise

THE study of forestry has become of such importance to the progressive farmer that the professor wishes to make his pupils familiar with the names of the popular trees. How many can you find concealed in the following woodland sketch?

If I remember rightly, Chief Forester Larkins it was who said that he would not swap Rico trees for the entire Colorado gold traffic. Her rye, wheat and cattle trade would pay a much better revenue to the state than did all the mines. Pop Larkins, as he was called, it appears, had a terribly funny experience last year while stopping at the Pacific or Kadaic Inn, a monster hotel in Denver. As he sat in his palanquin ceremoniously gotten up in a fancy pressed suit, he was wholly absorbed in watching a triangular fight between a big umpire, a little red fielder and the short-stop, each one intent upon creating a riot. A Cuban anarchist named Jose Bir chose to range with the players against the umpire and with a drawn sabre advanced to the attack.

Larkins could only see them through a haze, like a thick or yellow dust, which they kicked up, so he could not distinguish one from the other, but having seen them locked in a deadly grapple, which he resolved to break up, he filled a pail with whitewash from a mason's lime-box and gave them a pleasant soaking, which put each scamp hors de combat.

## Astronomical Puzzle

Here is an astronomical puzzle which is supposed to show the erratic path of the comet Heclai. Commencing with the small white star, show the shortest possible course through the exact center of the black stars so as to mark them all off and end with the big star.

In how few moves, in straight lines, could the comet Heclai destroy the entire constellation of sixty-two stars, beginning from and ending with the white stars?

## One-Word Puzzle

Place the same word in each of the following blank spaces.

The ——— of the mountain is capped with snow,
And grandfather's ——— is white, you know.
The ——— of his cane is small and bright,
And his ———s of wheat are a pretty sight.
The ——— of an army came one day,
With soldiers uniformed, bright and gay,
Who drove ten ——— of cattle away
And broke the ——— of a barrel of ale
And battered the ——— of many a nail.
They sat around the tables at ease,
Eating cabbage ———s and good ——— cheese.

## Puzzle of the Iceman

Every blank is to be filled with a word ending with ice.

At the time of the summer ———, the iceman, whom no one would accuse of ——— or ——— put up a ——— at an ——— in his ———, but the effect that with ——— toward none he would give good ——— to all, without ——— or ———.

Accordingly, he supplied the politician with ———, the lawyer with ———, the doctor with a ———, the judge with ———, the builder with a ——— and a ———, the gambler with his ——— in their den of ——— with ———, the bridal party with ———, the clergyman with a ———, the cat with ———, the drinker with ———, the geologist with ———, the woodman with a ———, the sailor with a ———, the dentist with a ——— and no one with the ———.

But in spite of all his efforts to supply ice to ———, some people objected so strongly to his ——— that they applied to the ——— for ——— regarding a ———, by which they might either push him into a ——— or over a ———.

## Roman Subtractions

Example: Subtract five from a fictitious story and leave an ancient name for Christmas. Answer: Novel, take away 5 (v) and it leaves Noël.

Take 10 from a state and leave a beverage.

Take 100 from a bird and leave a number of houses.

Take 100 from a tranquil and leave a charity.

Take 1,000 from additional and leave a mineral.

Take 1,000 from a pair and leave a beverage.

Take 10 from the top and leave an animal.

Take 5 from a frolic and leave a lively dance.

Take 500 from a piece of stamped metal and leave a ground grain.

Take 50 from a punctuation mark and leave a wild animal.

Take 5 from to bend and leave a remedy.

Take 5 from exist and leave a falsehood.

Take 100 from peaceful and leave a Scottish garment.

Take 5 from uncertain and leave a chill.

Take 5 from a mechanical power and leave a look of malice.

## A Charade

My first, gentle lady, you give to the youth,
Who now breathes the fond wish of his soul;
Whom with ardent affection, and honor and truth,
You perceive is needed in my whole.

In my snug little second, secure from the storm,
We the helpless and innocent find;
And my whole, when a contract or bargain you form,
You should give the agreement to bind.

## Somewhat Mathematical

Farmer Jones and his good spouse went to market to purchase horses and cows, which they attempted to drive home. But the drove was stampeded by a noisy automobile and ran away. They got as many together as they could find, but were not sure of the exact number of horses and cows purchased, but knew that they had spent just $752. And that they paid $37 each for a horse and $23 each for cows.

From the facts as stated, can you figure out the number of horses and cows bought?

## Answers to February 25th Puzzles

The Rebus says: Tye man d tied weight 4 no man.

The Letter From the Farm concealed the following articles in regular rotation: Cherries, potato, currant, hay, grapes, wheat, apple, sage, alfalfa, tomato, cabbage, celery, plum, millet, beans, pears, pea, peaches, garlic, carrots, hops, berries and clover.

Here is the way to draw the Plimsoll Mark:

### Somewhat Mathematical

In the puzzle of the pasture-field it is necessary to calculate upon the daily growth of the grass, when it will be found to last just thirty-six days.

### Simple Decapitations

Peach, pear, radish, rice, wheat, clover, orange, black, oat, wedge, sprayer, shears, drake, plow, cart and farm.

### Fun at Sing Sing

At Sing Sing the pals go by numbers and not by their names, so if you gave "Forty" seven cents and sold them for seventy, you would make nine hundred per cent.

Books, containing the finest collection of puzzles ever issued, will be distributed to the fifty sending the best answers to Sam Loyd, Box 826, New York City. When writing be sure to state which volumes have been received, so as to avoid duplicates, as there are twelve numbers.


# THIS AIR-RIFLE

## Without Cost

For You

This is the wonderful King Air-Rifle. It is a Repeater—shoots 150 times without reloading. It is just the rifle for a Boy. Here is your chance—**you can get it without cost.**

Fill out and mail the coupon below and we will send full particulars by return mail.

**For Our Boys**

### Would You Like to Get One?

You can get one without spending a cent. FARM AND FIRESIDE will help you earn it. You will be glad to do just a little work to get it. Thousands of happy boys already have earned a rifle easily from FARM AND FIRESIDE.

### A True Shooter

Boys, this rifle shoots accurately. Look out, crows and hawks, if a boy ever gets after you with this King Air-Rifle! It cultivates trueness of sight and evenness of nerve.

It uses no powder—makes no noise—uses air and shot. You will have use for it every minute.

Expert workmanship has made this a wonderful gun. This rifle is provided with pistol-grip, true sights, and is so strongly made it is almost impossible to get out of order. It is extremely simple in construction.

Any child can use it and become an expert shot. It makes boys grow to be manly, self-reliant men. Every boy should learn to handle a rifle. It makes them healthy and strong—sends them out of doors.

Any boy will be happy to get this rifle. No wonder every boy wants one, and we are glad to help every boy get one—without having to pay a cent for it.

### How to Get It

You can get this wonderful rifle without spending a penny if you will do a little work for it. Send in the coupon to-day to the Rifle Man or just write a post-card—say you want to earn a rifle. We will be glad to help you.

**Write To-day**

The Rifle Man,
FARM AND FIRESIDE, Springfield, Ohio.
Please tell me how I can get the famous King Air-Rifle without having to pay a cent for it.

Name .....

Address .....

# Who Wants a Talking Doll?

WE want every little girl in FARM AND FIRESIDE'S extensive family to have one of these beautiful talking dolls. Just think, this doll says "Papa" and "Mama," and cries just like a real baby. She opens and closes her eyes and goes to sleep, and with her pretty face and beautiful hair is just the doll that every girl will want. Her limbs are jointed, and her dress and hat are tastefully and prettily trimmed. This doll is manufactured for us abroad, in the country where all of the best dolls are made, and we have gone to considerable trouble and expense in order to secure this doll for our little ones. But we count this as nothing against the pleasure that we know this doll will give to the children, and we want every little girl in our large family to have one.

## This Wonderful Doll WITHOUT COST

Write us to-day, saying that you want to obtain FARM AND FIRESIDE'S Beautiful Talking and Sleeping Doll. We will then give you full particulars how the Doll can be obtained without one cent of expense to you.

WRITE AT ONCE TO

**FARM AND FIRESIDE**

SPRINGFIELD, OHIO

FARM AND FIRESIDE, Springfield, Ohio
Please tell me how I can get the Talking and Sleeping Doll, without cost.
Name.....
Address.....

# Home Papers Without Cost

**By special arrangement with the leading home and family papers in America, you can get any one of these great papers for a year without cost with Farm and Fireside as explained below.**

**Farm and Fireside / The Housewife** — both for **50c**
For One Whole Year

The Housewife is a bright entertaining monthly magazine, containing many wholesome serials and short stories and articles of unquestioned merit. It is a magazine that a woman looks forward to receiving each month. It is well illustrated with the work of the best-known artists. Housewife is edited by Lilian Dynevor Rice. It has excellent departments devoted to fashions, cooking, etc.

**Farm and Fireside / The Woman's World** — both for **50c**
For One Whole Year

In Woman's World the up-to-date articles and good stories are high class, for it pays more for them than any other publication. Woman's World is progressive. No woman who is interested in the vital issues of life can afford to miss Woman's World. Over two millions read it eagerly every month.

**Farm and Fireside / Successful Farming** — both for **50c**
For One Whole Year

Successful Farming is the leading general farm publication of the corn belt. It is of special interest and value to people living in this region on account of its close application to those peculiar local conditions. It is also chuck full of practical and condensed facts which are of timely value. Farm people in the corn belt can profit by this combination of farm papers.

**Farm and Fireside / Green's Fruit Grower** — both for **50c**
For One Whole Year

Green's Fruit Grower is packed from cover to cover with practical and valuable information on fruit culture. It covers every fruit grown, berries, orchard fruits, grapes, etc. Green's Fruit Grower has for many years been recognized as an authority on fruit culture. Green's Fruit Grower has also departments devoted to poultry and dairying. It is an all-around farm paper.

**Farm and Fireside / The Poultry Keeper** — both for **50c**
For One Whole Year

Poultry Keeper gives every month pointers and ideas for producing eggs and raising fowl that mean success. It is edited by the best men on Poultry Raising in America. It is filled with secrets of feed mixtures, quick-growing chicks, ideas that men hesitate to part with. Poultry Keeper has one motto—Make the Hen attend strictly to business. It is invaluable to the poultry raiser.

**Other Half-Dollar Clubs**

Farmer's Voice — Southern Planter
Up-to-Date Farming — Farm Poultry
Missouri Valley Farmer

**We will send Farm and Fireside and any paper mentioned in this advertisement, both for one year, for only 50 cts. They may go to different addresses if you wish.**

**The Above Offers Good Until May 10, 1911.**

**Farm and Fireside**
**Springfield, Ohio**

# OUR YOUNG FOLKS

## How They Got Their Names

### A Story for Little People—By E. M. Murray

ONCE upon a time, my kiddies, there was a poor widow with two children, "Didn't Mean To" and "Don't Want To." Of course, their mother had not named them thus, because she could not tell what they were going to be like at the time she named her babies. She had called them Susie and Tommy, but after they were big enough to talk, nobody called them by those names.

The neighbors began calling Susie "Didn't Mean To," and Tommy "Don't Want To" because those were the things the children were always saying. Perhaps you know that it has always been the fashion, away back of the time that father or mother or even grandmother can remember, for neighbors to call folk by the names that fitted them. Indians and that sort of people do it now, so that if an Indian baby should happen to cry very, very loud, his people would call him "Little-Chief-of-the-Great-Wails," or something like that. In the once-upon-a-time days everybody did as the Indians do now, and that was how Susie and Tommy came by their names.

Perhaps you would like to hear just what these queer little children were like. I don't suppose that you ever knew anybody like them, because the once-upon-a-time days are over long ago, and the same things do not happen now. So how could you know such children?

Well, "Didn't Mean To" was really a very nice child, only she was inconsiderate. That is a big word, and perhaps you do not know what it means, but when you are talking about big things, like the faults that spoil nice people, you sometimes have to use big words. "In-con-sid-er-ate" means not to think about other people, but always to do and say what is in one's own mind without stopping to think what harm it may do or what pain it may give.

Of course, Susie did not know that she was inconsiderate, because she did not know that word, and besides she had not thought about anything being wrong with her at all. This was the sort of thing she would do without stopping to think. One day she saw a little boy balancing himself on a fence. He was really scared to do it, but the other boys could do it and they laughed at him because he couldn't. So the little fellow thought he would try and perhaps he would get over being afraid.

Just as he had got up on the fence and was standing straight, although he was shaking a good deal, who should come around the corner of the house but Susie. The little boy did not see her nor hear her, and it popped into Susie's head that it would be the greatest fun imaginable to scare him.

So she pounced out on him barking and howling like an angry dog; the little boy was so scared that he fell off the fence and cut his head. All that Miss Susie could say was "I didn't mean to hurt him;" but that didn't help the little boy, you see, and the doctor had to put some nasty stitches in the cut on his head.

It must have been very hard for the poor widow to have one child inconsiderate and the other one selfish. Things are often very hard for widows who are also mothers, but nobody seems to know it. Tommy thought only of himself. He would laugh and sing and be as happy as a humming-bird so long as everybody was doing things for him and he was not asked to do anything for anybody else. But if he were called from his play to help somebody else, he began to whine and say, "I don't want to."

Sometimes when the poor widow was working very hard and was nervous and tired, she would say, "Tommy, please take your noisy play out in the back yard. I can't stand it in the house." And even though it might be a lovely day, when children should be out of doors, Tommy would snivel and say, "I don't want to." And it was through things just like this that Tommy got his name, which suited him well, I think.

One day the poor widow got a nice luncheon ready for her two children. They had good bread and butter and a lovely baked apple with sugar and milk on it. She put the milk-pitcher on the table that they might fill their mugs, for they were quite big enough to pour it for themselves.

Just as they were ready to eat, the front door-bell rang and the poor widow had to answer the door. Scarcely had she left the room when Susie said to Tommy, "You have my spoon. Hand it to me and I will give you this one." Tommy didn't really care about the spoon, but he was selfish, so he said with a whine, "I don't want to."

Quick as a wink it popped into Susie's head that she would make him give up that spoon. So she stood up on the rung of her chair, a thing the poor widow had often told her not to do, and reached across the table to snatch the spoon from Tommy. Tommy held on to it and began to cry, but Susie was stronger than he. She gave a mighty pull and jerked it out of Tommy's hand. In doing this, her elbow hit the milk-pitcher and over it went, smash! among the dishes. The pitcher got broken and also the bread-plate and Tommy's baked-apple saucer.

"Her elbow hit the milk-pitcher and over it went, smash!"

The poor widow, hearing the crash, came hurrying in and, oh, what a sight met her eyes! Two frightened, angry children, broken dishes, spoiled luncheon and the milk running down on her clean floor.

"I didn't mean to," whimpered Susie, but that did not mend the dishes, nor restore the luncheon, nor save the poor widow the work of cleaning the floor. Then when she told them that that was all the milk she had and that they would have to drink water with their meal, Tommy immediately whined, "I don't want to."

Finally the poor widow got the children to bed. Then she sat down by herself and cried to think how very hard it was for a poor widow, who was also a and Tommy's baked apple saucer. and, also, a selfish child.

But Susie and Tommy slept in their beds and never gave a thought to the pain they caused their poor mother. And that was just because one was inconsiderate and the other selfish.

The funny thing was that you'd never know it if you saw them asleep, but would think what very nice children they must be. In the once-upon-a-time days lots of people were nicer when they were asleep than when they were awake, and this is just what the poor widow thought when Susie and Tommy were asleep. I'm glad it isn't that way now, aren't you, my kiddies?

Next time I'll tell you little boys and girls how Susie's and Tommy's names were changed.

## Cousin Sally's Letter

DEAR GIRLS AND BOYS:—

It was such great fun reading our contest on "My Favorite Hero." Now I know what staunch, patriotic and loyal Americans my girls and boys are. And I would love to grip your hand just to show you how proud I am of you. How I wish we could all meet somewhere just to give three loud hearty cheers for "Old Glory."

Do you know what I have done this time? I have considered each letter in the light of a vote for the most popular hero, for I was curious to know which of all our honored, noble and beloved heroes the majority of my boys and girls loved best. This is what my record shows:

First in the list comes the Father of Our Country, George Washington, who received one hundred and fifty-seven votes; second, dear old Abe Lincoln, one hundred and twenty-four votes, and I know you'll be surprised when I tell you that the third most popular hero proved to be a dog. Sixty-two contestants voted this way. Next in the list came John Paul Jones, with ten votes; then two contestants voted for their father; two for their pony, that they said was their ideal hero; next, two votes for a boy who proved himself a hero by saving someone from drowning; while each of the following received just one vote: John Barry; Admiral Dewey; Arnold von Winkelried, a Swiss patriot; Robert Lee; Christopher Columbus; Roger Williams; General Grant; Sir William Wallace; Israel Putnam; General Charles Wolfe; George Armstrong Custer; Joan of Arc; Napoleon Bonaparte; Col. George Rogers Clark; Nathan Hale; Daniel Boone; Captain John Smith; General Lafayette; Chingachgook, an Indian chief, and one vote for the heroic deed of an engineer, and one for a horse.

The compositions were unusually good this time, which proves to me that you have been working hard this winter. Very shortly I expect to print some of the best compositions.

Our club is getting to be a tremendous organization. Every day brings new members. Lately, I have been asked so many times if non-subscribers can join. Of course they can, and I am always ready to give them a welcome into our happy circle. I wish all of our young readers and subscribers would join the club. The club button costs only five cents, and you can't help but like it.

Do write to me soon, everybody, for I am always eager to hear from you, and I love to print the most interesting letters.

Faithfully always, COUSIN SALLY.

## Announcement of Prize-Winners

THE winners of the first prize in the February 25th contest, on "My Favorite Hero," are Stacey Bowman, age thirteen, Greenup, Illinois, and Dorothy Lind, age thirteen, Middlebranch, Ohio.

For the next best five compositions, in order of merit, the prizes are awarded to Olive R. Brooke, age nine, Highwood, Connecticut; Harold L. Steinmetz, age nine, Milan, Indiana; Eloise Case, age sixteen, South Royalton, Vermont; Lucille Skilton, age sixteen, Ravenna, Ohio; Emma Peterson, age sixteen, Minden, Nebraska.

## Honor Roll

BESSIE E. HANNAH, Oxford, Ohio; Russell D. Stiefbold, Plainfield, Illinois; Margaret Simons, Northville, New York; Aubrey White, Longmont, Colorado; Louise Bartz, Vandergrift, Pennsylvania; Fay Williams, Plaza, Washington; Aletha Boren, Euclid, Pennsylvania; Denton McCormick, Cameron, West Virginia; Frances E. Wood, Ridgway, Colorado; Hugh C. Frederick, Hamilton, Ohio; Carrie Vosburgh, Springville, New York; Lillian Curtiss Townville, Pennsylvania; Olga Erf, Monroeville, Ohio; Ethel Brown, Waterloo, Iowa; Lowry Baynes, Salem, Indiana; Laura Newman Kline, Bovina, Mississippi; Blanche Meriwether, Emden, Illinois; Vera G. Rowland, Deersville, Ohio; Julia W. Loan, Onondaga, New York; Alice Graham, Gardiner, New York; Minnie Depler, Peabody, Kansas; Grace Erb, Youngstown, Ohio; Lois E. Erler, Curtiss, Wisconsin; Forbes Adams, Moscow, Vermont; Mary Brockway, Lewis, Kansas; Eva McCoy, Trumbull, Nebraska; Florence M. Ehle, Johnstown, New York; Emma Bonham, Tuscola, Illinois.

## The Letter-Box

DEAR COUSIN SALLY:—

I received my C. S. C. pin this morning. Many thanks for it. I am very much pleased with it and your good letter. I am glad to be a member of Cousin Sally's Club.

I was sorry I couldn't write about a flower garden. But last summer I took charge of the poultry-raising and raised over a hundred little chicks. I have one white rooster that I raised. I call him Snowflake, as he is so white. He will fly on my shoulder when I am out in the yard and when I go to feed the chickens, he is the first one to be seen.

If there is any cousin who will exchange post-cards with me, I will gladly do so.

I will close my letter with all sorts of good wishes to our club members. I hope our club will improve in every way. I will do all I can to help it along. Your cousin,

RACHEL DOUGHTY, Age Fourteen,
Ft. Bidwell, California.

DEAR COUSIN SALLY:—

I guess you thought I was not going to write you. I received the button and think it is fine. I like to read our page. I think it is so interesting. I go to school. I have six books—speller, arithmetic, grammar, history, reader, geography. I used to think geography was hard to spell. This is how I learned to spell it: "George Emerson's old grandmother rode a pig home yesterday." That is a funny way to spell, isn't it? In our school in spelling everyone in each class gets a pencil for the most head-marks. I got it once in our class. We get a pencil and tablet each month. Your cousin,

ESTHER ALBERT,
Dillsburg, Pennsylvania.

DEAR COUSIN SALLY:—

How well I enjoy our page; I think it is just lovely. I am wearing the pretty pin.

I would like to correspond with some cousins.

I live on a farm of one hundred and forty acres. We have a lot of cattle, horses, hens and chickens.

Hoping that the club will ever prosper,
Your cousin,

MILDRED WAITE, Age Fifteen,
Goffstown, New Hampshire.

# The Room of Many Shadows

[CONTINUED FROM PAGE 20]

the stable. You can't mix me up with Stetson's doings."

"Can't we? Jim, you're no lawyer and you don't know how to manage a lie. Make a clean breast of it. It may help you and it won't hurt Stetson. Begin with the old lady's coming. What turned Stetson against her? What's the plot?"

"I don't know of any plot. What Stetson told you is true."

"Jim," declared the coroner, "you are in a more serious position than you realize. You may be devoted to Stetson, but there are others who are not. A night such as you have been through quickens the conscience of women if it does not that of men. One has been near death. The story of such a woman is apt to be truthful. Do you want to hear it? I have no objections to your doing so."

"What story? I don't know of any story. Women have easy tongues, they talk when they have nothing to say."

"This woman has something to say, or why should she have asked to be confronted with you? Have her in, Mr. Rodney. I imagine that a sight of this man will make her voluble."

A sneer from Jim; but when Rodney, crossing to the door, opened it and let in Hester, this token of bravado gave way to a very different expression and he exclaimed half ironically, half caressingly:

"Why, she's my sweetheart! What can she have to say except that she was mighty fortunate not to have been burned up in the fire last night?"

Doctor Gray and the detective crossed looks in some anxiety. They had not been told of this relation between these two, either by the girl herself or by the others. Gifted with a mighty close mouth, she had nevertheless confided to Rodney that she could tell things and would, if he brought her face to face with the man who tried to shoot him while he was helping her down from the roof. Would her indignation hold out under the insinuating smile with which the artful rascal awaited her words? It gave every evidence of doing so, for her eye flashed threateningly and her whole body showed the tension of extreme feeling as she came hastily forward, and pausing just beyond the reach of his arm, cried out:

"You had a hand in locking me in. You're tired of me. If you were not, why did you fire those bullets my way? I was escaping and—"

Jim thrust in a quick word. "That was Stetson's move—locking your door. I had nothing to do with it."

This denial seemed to influence her. She looked at him and her breast heaved. He was good to look at. Rodney trembled for the success of their venture. Would this young giant's sturdy, blond figure and provoking smile prevail against the good sense which must tell her that he was criminal to the core, and that neither his principle nor his love were to be depended on? No, not yet. With a deepening flush, she flashed out:

"You hadn't? You didn't want me dead? Why, then, those bullets? You might have killed me as well as Mr. Rodney; but you fired!"

"I saw you on the roof, Hester. The fire was near. I thought that neither you nor the man helping you could escape. A death of that kind is horrible. I loved you too well to see you suffer. My gun was behind the barn door. I got it and fired out of mercy."

She gasped. So, in a way, did the two officials. The plea was so specious, and its likely effect upon her so evident.

"Jim, can I believe you?" she murmured.

For answer, he fumbled in his pocket and drew out a small object which he held up before her. It was a ring, a thin, plain hoop of gold. She had no sooner seen it than her whole face flushed and a look of positive delight supplanted the passionately aggrieved one with which she had hitherto faced him.

"You had bought *that?*"

"For you," he simply said.

The joy and pride with which she regarded him, despite the protesting murmur of the discomforted Rodney, proved that the wily Jim had been too much for them. She believed him.

"You see, Jim didn't mean any harm, only kindness to us both. If you will let him go, I'll be more thankful than when you helped me down off the roof."

It was for the coroner to answer.

"We'll let him go when we're assured that he means all that he says. I think he's deceiving you and that you are a very foolish girl to trust him. Men don't fire on the women they love, for any reason. You'd better tell me what you have against him."

"I haven't anything against him *now*."

"But you were going to tell something that would help us understand what has taken place here."

"I guess I was fooling."

"People are not apt to fool who have just been in terror of their lives."

Her eyes sought the ground. "I'm just a hard-working girl," she muttered almost sullenly. "What should I know about that man Stetson's dreadful doings?"

"You think they were dreadful?" Doctor Gray asked.

"He locked me in my room," she declared violently. "That wasn't done for fun."

"And is that all you can tell us? Don't look at Jim. Answer from your own mind."

"I don't know what to say. I don't even know what you want."

"I'll tell you. Your work in the house has been up-stairs work, hasn't it?"

"Yes, sir. I did up the rooms—some of them," she added cautiously.

"What rooms? Front rooms or rear rooms, or both?"

"Rooms in front; those on the third floor."

"But you sometimes went into the extension, now, didn't you?"

"I've been down the hall."

"Haven't you been in any of the rooms there, No. 7 for instance?"

"No, sir; my work didn't take me there."

"But you've heard of the room?"

"Yes, sir. The girls sometimes spoke of it. It had a bad name, and wasn't often used. No girl liked to go there. A man was found dead in it once. They said he killed his own self."

"Have you ever heard anyone describe this room?"

"No, sir."

"Tell what paper was on the wall?"

"I can't, sir."

"Perhaps Jim here can help us. He's been in the room often."

"The paper was blue; you know that; you saw it yourselves yesterday," blurted forth the man thus appealed to.

"Always blue? Never any other color that you remember?"

"No; but I've been in the house only ten years."

"Oh, is that all! And do you mean to say that this room has not been redecorated in ten years?"

"How can I tell? I can't remember every time a room is repapered."

"You ought to remember this one because of a very curious circumstance connected with it. You heard what Miss Williams had to say about a room whose walls were covered with muddy pink scrolls."

"Oh, she!" His shrug was very expressive. Hester continued to look down.

"Miss Williams seemed to know what she was talking about," pursued the coroner in direct contradiction of the tone he had taken the day before. "Her description was quite vivid. It would be strange now if those walls had once been covered with just such paper as she described."

"Was it?" shot from Doctor Gray's lips with all the vehemence of conscious authority.

There was an instant's pause, then Jim laughed sharply.

"I should like to know if it was. I'd think it a very curious co—co— What's the word? quindecence, or something like that."

"The deepest fellow I know," grumbled the baffled coroner into Rodney's ear, as the latter stepped his way, "or just the most simple." Then added aloud: "Lift up my coat there, please."

Rodney did so. The garment mentioned lay across a small table which formed the sole furnishing of the place, and when Rodney raised it, there appeared lying underneath several small pieces of plaster which Doctor Gray immediately pointed out very carefully to Jim.

"Do you see these bits from a papered wall?" he asked. "They were torn from that of No. 7, between the breaking out of the fire and Mr. Rodney's escape. Come closer; you may look at them, but keep your fingers off."

Jim laughed again loudly, in a way he probably meant to express derision; then he stood silent, gazing curiously down at the pieces before him. The blue paper peeling away from the pink made it impossible for him to deny that just such paper as Miss Williams described had been on the wall prior to that they had all seen and remembered. Rodney's first attempt to settle this fact must have failed from his having chosen a spot for his experiment where the old paper had been stripped away before the new was put on.

"Well, I vum!" Jim broke out, turning and looking from one face to another with a very obvious attempt to carry off the matter jovially.

But the coroner had small appreciation for this attempted display of humor, and motioning to Rodney to take her away, he subjected the clerk to a second examination which, though much more searching and rigorous than the first, resulted in but one discovery, and that was that for all his specious love-making he cared no more for the girl than for one of his old hats. This the coroner confided to Rodney when he came in a few minutes later looking as disconsolate as the other over his own failure to elicit anything further from the resolute Hester.

"But you can't make her believe that now," whispered back Rodney.

"Then we must trick him into showing her his real feelings."

"How would you set to work? He's warned, she's warned, and life if not love is at stake—"

He was interrupted by a sudden sound of hubbub without.

"It's Stetson! Stetson!" declared Rodney in his sudden excitement.

But again he was mistaken. It was not the landlord, but his wife, wild-eyed, disheveled, with bits of straw in her hair from some sheltering hayrick and in her hand a heavy gold chain which, as the morning sun shone across it, showed sparkles of liquid clearness at short intervals along its whole length.

Diamonds! Miss Quigley's diamonds, and the woman who held them was gibbering like an idiot.

The effect on Jim was remarkable. Uttering a piteous cry, he bounded from their hands and fell at the woman's feet.

"Mother Stetson!" he moaned. "Mother Stetson!" and sought to kiss her hand and wake some intelligence in her eye.

Meanwhile the coroner and Rodney looked on, astonished at these evidences of real feeling. Then their eyes stole behind them, and simultaneously both started back for the outhouse they had just left. Hester was standing in the doorway, surveying the group before her in surprise, with trembling, half-parted lips.

"Jealous!" muttered Rodney. "Providence has done our little trick for us. She will talk now. Look! She is beckoning to us. Now we shall hear her story."

## Chapter IV.

"SPEAK quickly. You'll never regret it, Hester. He's no mate for you. You have seen this paper covered with the pink scrolls before?"

"Yes," she gasped, with quick glances at her lover through the open doorway. "He never shed tears for me!" she exclaimed bitterly. "I didn't know he could for anybody. I wouldn't keep the truth back now if the minister was waiting to marry us. He loves that old woman and he doesn't love me. Hear him call her 'mother.' Are mothers dearer than sweethearts? Oh, I'll tell! I don't know anything about the old lady, but I do know about this: That room was repapered the night before last, secretly, by him. I didn't see him do it, nobody did, but this is how I know: Some weeks ago I was hunting for something in the attic, when I stumbled upon some rolls of old wall-paper. The end of one of the rolls was torn and lay across the floor. It was blue and striped, shabby and old-looking. The rain had poured in on it, and it was all moldy and stained. I didn't give two thoughts to it then, but when, after the old lady's death, I heard one of the girls say something in the kitchen about a room being blue now which only a little while ago was pink, I stole up into the attic to see if those rolls were still there and found them every one gone. Oh, what is happening now?"

"One of the men is trying to take the diamonds from the woman and she won't let him. Her wits are evidently gone—frightened away by the horrors of the night—or she wouldn't try to cling to what has branded her at once as a thief."

The word seemed to pierce the girl. She stared out at her former mistress, who was again being soothed by the clerk, and murmured hoarsely:

"He doesn't seem to care. He's just as good to her. Oh, oh, I once served a term myself for—for a smaller thing than that and I thought that was why— Oh, sir, oh, sir, there's no mistake about the paper. For I went looking about in the barrels and where they throw the refuse for bits to prove that this papering had been done in the night. It seemed so wonderful to me that anyone, even Jim, who is the smartest man you ever saw, could do such a job as that and no one know. And though I found nothing in the barrels, I did in the laundry stove. It was full of burned paper, and some of it showed color, and it was just that musty old blue I had seen in the attic."

She paused with a terrified gasp; Jim was looking at her from the open door.

"Oh, Jim!" she wailed out, "why weren't you true to me? Why did you pretend to love me when you didn't?"

He gave her a look, then turned on his heel.

"I've said my last word to *you*," he quietly declared, then stood silent a moment, with slowly laboring chest and an air of deepest gloom. Then, as his eye stole outside again, they saw the spirit melt within him and simple human grief take the place of icy resolution. "She was like a mother to me," he murmured. Suddenly his head rose and he faced the coroner.

"You're right," said he. "It's all up with me. No home, no sweetheart, no missus. *She* [there was no doubt as to whom he meant by that tremulous *she*] was the only one I've ever cared for and she's just shown herself a thief. I am no better. This is our story."

I will not give it in his words, but in my own. It will be shorter and possibly more intelligible.

The gang, if you may call it so, consisted of Stetson and these two, with a servant or so included. Robbery was its aim, a discreet and none too frequent spoilation of such of their patrons as lent themselves to their schemes. Stetson was the head, his wife the soul of this business and Jim their devoted tool. The undermining of the latter's character had been begun early. The affair of the old woman was an unpremeditated one. It happened in this wise: Miss Williams' story had been true in every particular. Her mother *was* with her when she came to this house, and he, Jim, was the person sitting far back in the shadows when the young lady registered their names. There was nothing peculiar in their behavior except the decided demand which Miss Williams made for separate rooms. This attracted his attention, for the house was pretty full and only one room was available in the portion reserved for transients. What would Stetson do? He hemmed, hawed and looked about for his wife. She was in the inner office back of him, and, attracted by his uneasy movements, showed herself. A whispered consultation followed, during which she cast a glance Jim's way. He understood her instantly and lounged carelessly forward. "Let them have No. 7," he said. "It's all fixed for the night."

No. 7 was never given to guests. It was little more than a closet and was not even furnished. A cot had been put in there this afternoon, but only to meet a special emergency. A long-impending conference was going to be held between him and his employers after the closing up of the tavern, and he had planned this impromptu refuge to save himself a late walk to the stable. At his offer to pass the same over to the Williamses, the difficulty of the moment vanished. Miss Williams was shown to the one empty room in front, and the mother to the small closet so hastily prepared for the clerk. Mrs. Stetson accompanied her, and afterward visited her again for the purpose of carrying her a bowl and some water. It was then she encountered Miss Williams who, anxious for a second and more affectionate good-night from her mother, had been wandering the halls until she found the room. The bareness and inhospitable aspect

[CONCLUDED ON PAGE 26]


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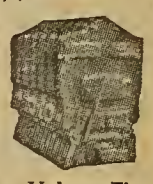

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# The Room of Many Shadows

[CONTINUED FROM PAGE 25]

of the place must have struck her, for she stopped in the doorway and, looking back, exclaimed: "What ugly paper! Magenta, too, the one color my mother hates."

The business which kept them all up that night was one totally disconnected with the Williamses or anyone else in the house. A large outstanding obligation was coming due which Stetson lacked the money to meet. Something must be done with the stolen notes and jewelry which they had accumulated in times past and had never found the will or courage to dispose of. A choice must be made of what was salable. In his way Stetson was a miser of the worst type and cared less for what money would do than for the sight and feeling of the money itself, while Mrs. Stetson was even more tenacious in her passion for the trinkets and gems. Jim, on the contrary, cared little for anything but the good of the couple to which he had attached himself. He wished Stetson to be satisfied, but not at Mrs. Stetson's expense. Shutting-up time came, and with it the usual midnight quiet. All the doors had been locked and the curtains drawn over the windows and across the glass doors of the office. They were determined to do what they had never done before, lay out the loot and make a division. Mr. Stetson beckoned Jim into the office and, telling him to lock the door behind him, stepped around the bar to summon his wife. Jim never knew how it happened. He flung the door to and locked it, as he thought, but he must have turned the key too quickly, for the bolt of the lock did not enter the jamb, as they afterward found. Meantime they felt perfectly secure. The jewels were brought out of Mrs. Stetson's bedroom and laid on the desk. The securities were soon laid beside them. They had been concealed behind a movable brick at the side of the fireplace. Then the discussion began, involving more or less heat and excitement.

How long this lasted no one ever knew. At half-past eleven no change of attitude had taken place either in Stetson or his wife. At twelve the only difference marked by Jim was the removal of the securities to Stetson's breast pocket, and of the diamond-studded chain to Mrs. Stetson's neck. The former were too large for the pocket, the latter too brilliant for the dark calico background they blazed against. Jim felt the incongruity of this latter, but had no words for the situation. He was absorbed—and he saw that Stetson was absorbed—in watching her broad hand creeping over those diamonds and huddling them up in a burning heap against her heart. There was fear in the action, fierce and overmastering fear, and so there was in her eyes which, fixed and glassy, stared over their shoulders at the wall behind, as though something had reached out from that wall and struck at the very root of her being. What did it mean? There was nothing in the room to affright her. Had she gone daft? Or—

Suddenly they both felt the blood in their own veins congeal; each turned to each a horrified face, then slowly and as if drawn by a power supernatural and quite outside of their own will, their two heads turned in the direction she was looking, and they beheld standing in their midst a figure—a specter—no, it was a woman, a living, breathing woman, with eyes fastened on those jewels, those well-known much-advertised jewels. So much they saw in that instant flash, then nothing! For Stetson, seized with a frenzy of fear, had taken the chair from under him and had swung it at the figure. A lamp had stood on the bar top. It was caught by the backward swing of the chair, overturned and quenched. The splinter of glass mingled its small sound with an ominous thud in the thick darkness. It was the end of all things; the falling of an impenetrable curtain over a horror half sensed, yet all the greater for its overpowering mystery.

The silence—the terror—the unspeakable sense of doom which gripped them all was not broken by a heart-beat. All listened for a stir, a movement, where they could see nothing. But the stillness remained unbroken. The silence was absolute. The figure which they had believed themselves to have seen had been a dream, an imagination of their overwrought minds. It could not be otherwise. The door had been locked, entrance was impossible; yet the doubt, the possibility of that belief having been true, held them powerless. The moments were making years of themselves. To each came in a flash a review of every earthly incident they had experienced, every wicked deed, every unholy aspiration. Stetson grit his teeth; it was the first sound which had followed that awful thud and, slight as it was, it released them somewhat from that awful tension. Jim felt that he could move now, and was about letting forth his imprisoned breath when he felt the touch of icy fingers trailing over his cheek, and started back with a curse. It was Mrs. Stetson feeling about for him in the impenetrable darkness, and in another moment he could hear her smothered whisper:

"Are you there, Jim?"

"Yes; where are you?"

"Here," said the woman, with an effort to keep her teeth from striking together.

"For God's sake, a light!" came from the hollow darkness beyond.

It was Stetson's voice at last. Jim answered:

"No light for me. I'll stay where I am till daylight."

"Get a light, you fool!" commanded Stetson, but not without a tremble in his usually mild tone.

Hard breathing from Jim, but no other response. Stetson appeared to take a step nearer, for his voice was almost at their ears now.

"Jim, you can have anything I've got so as you get a light now."

"There ain't nothing to light here. You broke the lamp."

Quiet for a moment, then Stetson muttered hoarsely:

"If you ain't scared out of your seven senses, you can go down cellar and bring up that bit of candle."

Into the cellar! Not Jim. The moving of the rickety table which his fat hand had found and rested on spoke for him.

Another curse from Stetson. Then the woman, though with some hesitation, said with more self-control than could be expected:

"I'll get it," and they heard her move away from *it* toward the trap-door behind the bar.

The two men made no objection. There was no sound for some time, unless it were the panting of Stetson's breath somewhere over by the bar. Then the stair creaked. She must be nearly up.

"Here's matches and the candle," came in a hollow voice from the trap-stairs.

A faint streak appeared for an instant against the dark, then disappeared. Another, but no lasting light. The matches were too damp to burn.

"Jim, ain't you got a match?" appealed the voice of Stetson in half-choked accents.

After a bit of fumbling a small blaze shot up from where Jim stood.

There was light now—they could see—but not one of them looked in the one direction where all their thoughts lay. Instead of that, they rolled their eyes on each other, while the match burned slowly out. Mrs. Stetson from the trap, her husband from the bar, and Jim. Suddenly he found words, and his cry rang through the room:

"The candle! the candle! this is my only match. Where is the candle?"

Stetson leaped forward and with shaking hand held the worn bit of candle to the flame. It is lighted.

Over it they give each other one final appealing stare. There's no help for it now; they must look. A simultaneous gasp from them all betrays the worst. It had been no phantom called into being by their overtaxed nerves. A woman lay before them, face downward on the hard floor. A woman dressed in black, with hat on head and a little satchel clutched in one stiff, outstretched hand. Miss Williams' mother! The little old lady who had come into the place four hours before!

Jim stepped over to her side and endeavored to raise her. His lips moved with the one fatal word which ends all hope:

"Dead!"

"Dead?" echoed the now terrified Stetson and his wife.

Jim was the least overcome of the three. Meanwhile Mrs. Stetson, with her eyes on her husband, had backed slowly away till she had reached the desk, against which she now stood with fierce and furious eyes, still clutching at her chain.

Stetson watched her fascinated. He had never seen her look like this before. What did it portend?

"Coward!" fell from her lips, as she stared with unrelenting hate at her husband. "An old woman who was not even conscious of what she saw! I'll not stand for this killing. You may count me out of this and the chain, too. If you don't—" a threatening gesture finished the sentence and the two men looking at her knew that they had come up against a wall.

"Sarah!" Was that Stetson speaking? "Are you going back on me now?"

She pointed at the motionless figure lying on the office floor, then at the securities showing above the edge of his pocket.

"Were we not close enough to discovery, without drawing the attention of the police by such an unnecessary murder? She was walking in her sleep. I remember her eyes as she advanced toward me; there was no sight in them."

"You lie!" It was the only word which Stetson found to ease the shock which this simple statement caused him. But Jim saw that he believed her, notwithstanding, from the nature of the glance he shot at his poor old victim. His wife saw it, too.

"You'll let me keep the chain," she said, "and you'll use your wits, now that you have used your hand, to save yourself and myself from the charge of murder."

"It was not murder," Stetson uttered in an indescribable tone after a few minutes of cautious scrutiny. "The old lady fell and struck her forehead. See! the bruise is scarcely perceptible. Had she been younger—"

"A sudden death from any cause in this house at just this time is full of danger for us," coldly broke in his wife.

"She didn't die in this house," fell from his lips in his most oily accents. "She fell in the woods; the path is full of bared roots, and there she must be found to-morrow morning. Jim, are you up to the little game?"

Jim, who was drawing his first full breath, answered with a calm enough nod, whereupon Stetson bade his wife to take a look outside and see if the way was clear for them to carry the body out.

She did not move. He fell into a rage; an unusual thing for him.

"Bestir yourself! do what I bid you," he muttered.

Her eyes held his; her face took on the look he had learned to dread. Finally she spoke:

"And the daughter! What about the daughter?"

"The mother first; we'll look after the daughter later."

Mrs. Stetson shivered; then as her hand spread itself over the precious chain sparkling with the sinister gleam of serpent's eyes on her broad bosom, she grimly muttered:

"Let us hear now; I'm for no more risks, I tell you."

Jim took a step forward. He thought his master was about to rush upon her. But he was only gathering up his faculties to meet the new problem she had flung at him.

"The girl's a mere child; we shall have no difficulty with her," he muttered, broodingly. "Who saw these two come in?"

Then it came out that they gradually came to recognize that no one but themselves knew of the old woman's coming. Further consultation developed that the use to which No. 7 had been put was known to but one of the maids, who could easily be silenced. Whereupon Stetson told his scheme.

The sensations of the next half hour, as told by Jim, would make your flesh creep. They did not dare to carry a lamp to light the gruesome task. They stumbled once, and the low cry Jim uttered caused them new fears. Was that a window they heard flying up? No; but something moved in the bushes. They were sure of this, and guiltily shook in their shoes; but nothing advanced out of the shadows, and they went on.

But the worst was when they had to turn their backs upon the body left lying face downward in the cold, damp woods.

The sight of a single thread of light marking the door, left ajar for them by Mrs. Stetson, was a beacon of hope to them which was not even disturbed by the sight of her wild figure walking in a circle around and around the office, the stump of candle dripping unheeded over her fingers, and her eyes almost as sightless as those of the form left in the woods.

"Sarah!" exclaimed her husband, laying his hand on her.

She paused at once. The presence of the two men had restored her self-possession.

But all was not well yet. There was the register with the two names, those of mother and daughter, written in plain black and white. Jim drew Stetson's attention to it.

"Oh, that's nothing!" exclaimed the landlord, and, taking out his knife, he ripped the leaf out, together with the corresponding one in the back. "The devil's on our side all right, or why did she pass over the space at the bottom of the page and write their two names at the top of the next one?"

He started, for his wife had clutched his arm.

"Yes, the devil's on our side so far," said she, "but there he stops. I have just remembered something that will upset our whole plan and possibly hang us. Miss Williams visited her mother in No. 7 and noticed the room well, and particularly the paper. Now if she is able to describe that paper, it might not be so easy for us to have our story believed."

For a minute all stood aghast, then Jim quietly remarked: "It is now one by the clock. If you can find me some of that old blue paper I once chucked under the eaves in the front attic, I will engage to have it on those four walls before daylight. Bring the raggedest rolls you can find. If it shouldn't be dry to the touch when they come to look at it to-morrow, it must look so stained and old that no one will think of laying hand on it. I'll go make the paste."

As Jim was one of the quickest and most precise of workers at anything he understood, this astonishing offer struck the other two as quite feasible. The paper was procured, the furniture moved back, and the transformation made in the room in question which astonished even those concerned in it. Dawn rose upon the completed work and, the self-possession of all three having been restored to them with the burning up of such scraps as remained after the four walls were covered, they each went to their several beds for a half-hour of possible rest. Jim was in No. 7. He has never said what that half-hour was to him!

The rest we know. The scheme did not fully succeed, owing to the interest awakened in one man's mind by the beauty and seeming truth of Miss Williams. Investigation followed which roused the landlord to a sense of danger threatening them from the curiosity of Rodney, and it being neck or nothing with him, he planned the deeper crime of burning up room and occupant before further discoveries could be made. What became of him in the turmoil which followed, no one could tell, not even Jim. Of Mrs. Stetson he could tell more. She had not been taken into their confidence as regards the fire, some small grains of humanity remaining in her which they feared might upset their scheme. She had only been given some pretext for locking Hester in her room, and it was undoubtedly her horror at her own deed when she saw to what it had committed her which unsettled her brain and made her a gibbering idiot for life.

Or was it some secret knowledge of her husband's fate, unknown to others? We cannot tell, for no sign nor word of Stetson ever came to dispel the mystery of his disappearance.

And this is the story of Four Oaks Tavern and its room of many shadows.

The romance and the promise underlying this tale of horror, neither Jim nor I can give you. That is only known to two persons, of which I am not one.

[THE END]

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What is the difference between form and ceremony? You sit upon one and stand on the other.

What is the most awkward time for a train to start? Twelve-fifty, as it's ten to one if you catch it.

Why is a camel a very pugnacious animal? Because he always has his back up.

Why can the world be compared to music? Because it is so full of sharps and flats.

Which is the easier profession, a doctor's or a clergyman's? A clergyman's; he preaches, the doctor practises.

# The Housewife's Letter-Box

## Do You Need Help

Have you been looking for a special recipe for years? Do you need any information on houseeold matters? And do you meet with little problems in the home that you wish someone would solve for you—someone who has had a little more experience than you? Then why not make use of YOUR OWN department and ask the questions which have been troubling you? This department has proved that the spirit of helpfulness is abroad in the land, especially among the women of the farm. That our readers have the mutual desire to help one another evidenced by the large and prompt response that we have had to the questions which are printed here monthly. There is no payment made for contributios to these columns. All answers and inquiries should be addressed to "The Housewife's Letter-Box," care of Farm and Fireside, Springfield, Ohio.

If an immediate answer is desired, it will be sent, provided a two-cent stamp is inclosed.

## Questions Asked

*Will someone please tell me—*

The directions for knitting a narrow lace called French lace or any pretty narrow pattern? MRS. T. C., Ohio.

How to make soda or oyster crackers, also pretzels? I know that the pretzels should be boiled in lye-water, but mine never get brown in the oven and are heavy. MRS. H. S. S., Pennsylvania.

How to can corn, okra and tomatoes, also how to make cooked icing so that it will get perfectly hard and dry? How to make apple-roll? MRS. Y., Arkansas.

How to color cotton goods with copperas? MRS. R. T. D., Ohio.

How to can young beets? MRS. H. P. C., Virginia.

How to prepare mustard with turmeric—the kind you buy at the grocery-stores? MRS. A. L. W., Ohio.

How to make portières out of corn? MRS. R. C. Mc., Ohio.

How to make hulled corn? Some call it lye-hominy. MRS. F. J. S., Connecticut.

## Questions Answered

**For Mrs. C. I. C. Indiana**—For two years I sold cream to a creamery, and I always tried to send in my cream while sweet. There is no more butter-fat in sweet cream than in sour, but the sweet cream is more easily stirred, and unless the cream is thoroughly mixed, it cannot be properly tested. Never, under any circumstances, add new cream to the old until it has become cold. Three times a day is not too often to stir the cream, and in hot weather the can, or receptacle, should be placed on ice or, lacking that, in very cold water. In winter, as I live out in the country, I often Pastuerized my cream, by heating each day's skimming, never adding it to the cold cream for at least twelve hours.

It should be stirred frequently while heating, and removed as soon as it begins to steam and look crinkly on top. Cream treated in this way will keep sweet a long time, and if you want to churn some for home consumption, heat it to about fifty-five degrees, or if you have no thermometer, heat just so it tastes slightly warm. A little practice will soon give you the required experience. Butter made from Pastuerized sweet cream, churned at the proper temperature, resembles granules of gold. MRS. J. T. M., Oregon.

**To Cook Fried Apples** for Mrs. M. H., Ohio—Sour apples: Cover the apples with warm water, let set a while, then rinse well and put on the stove to cook. Cover with plenty of water, as the dried fruit absorbs it very rapidly. A few handfuls of raisins cooked with the apples give them a good flavor. Add sugar when the apples are almost done. A SUBSCRIBER, Virginia.

An interesting article on making perfumery at home will be published in our next Letter-Box. It was contributed by one of our readers and contains suggestions for making a home-made still and we think it may be helpful to the readers who were interested in the question printed not long ago about extracting oil from peppermint, etc. HOUSEWIFE EDITOR.

**To Can Peas** for Mrs. T. S., Illinois—I have had good success canning peas as follows: Fill glass jars with the shelled peas and then put in all the cold water you can, being careful to remove the little air bubbles that rise to the top. Put on rubbers and screw covers partly on. Put some straw or hay in the bottom of your wash-boiler—just enough to prevent the jars from resting on the bottom. Place the jars in the boiler and wind old towels or other pieces of cloth around them so they will stand firm as possible. Then put in cold water to the depth of half the jar or a trifle more. Place over fire and when water boils let the peas cook two and one half or three hours, according to the age of the peas. Add more hot water if necessary. Screw covers on tight and set away to cool. Do not remove covers. I cook wax or green beans in the same way. I used the same recipe for Lima beans, but they would not keep. Could one of the ladies tell me how to can them? We are very fond of Limas and I would like very much to put some up for winter use. MRS. L. P. S., Illinois.

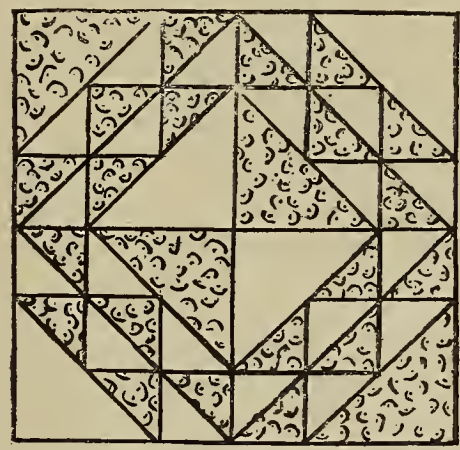
**How to Dry Beef** for F. M. F., Iowa—I believe this is the recipe which you have requested. It was printed in our November 25th, 1910, issue:

For twenty pounds of beef cut in convenient shape use one pint of salt, one teaspoonful of saltpeter and one fourth pound of brown sugar. Mix well and divide into three parts and rub the pieces thoroughly with the mixture for three successive days. Let it lie in the liquor it makes for six days and then dry. The best way to dry beef is to place the pieces on earthen platters and set in a moderately warm place, turning the beef every day. It should not become too dry or it will be tasteless, and when it is ready to put away it can be kept in paper sacks in a cool place. HOUSEWIFE EDITOR.

**To Keep Cheese From Molding** for E. V. La G., New York—Wrap cheese in a cloth, which should daily be wrung out of well-salted water. Keep in earthen crock or wooden butter-tub in the cellar or some place where it is cool. This information was given to me by the wife of a Swiss cheese manufacturer, and I have kept cheese perfectly even in hot weather. N. M. M., Wisconsin.

Mrs. H. W. L., of New York, writes that cheese will not mold if wrapped in a cloth wet in vinegar.

**To Steam a Cake** for Mrs. J. H. B., Massachusetts—Mix your fruit-cake according to directions. Fill a cook-pot over half full of water, set it next to the fire. Have the water boiling, set your steamer on the pot, put your cake in a mold and put the mold in the steamer and cover the steamer with a lid that fits. Steam one or two hours according to the size of cake. When your cake is done remove from the steamer and set it in the oven about one half hour. Be careful the oven is not too hot. A READER, Virginia.



"Corn and Beans" quilt block, contributed by I. A. H., New York, for Mrs. M. A. D., Tennessee

**To Get Rid of Flies** for Mrs. G. E. K., Ohio—All the windows should be made fly-proof. On days when the flies seem inclined to stick to the doors, take a cloth wet in kerosene and rub the screen on the inside and outside at least three times a day. Have plenty of fly-paper around. It can be made as follows: Take equal parts of melted resin and castor-oil and spread while warm on strong, thick paper. Or use four ounces of quassia chips boiled in one pint of water. When cold, strain, then add water to make one pint, and two ouuces of alcohol. Sweeten with sugar and pour into saucers. HOUSEWIFE EDITOR.

**To Cook Dried Sweet Corn** for Mrs. M. H., Ohio—One teacupful of dried corn, wash, put it in a vessel (not iron), pour boiling water over it and let simmer (not boil) for two hours. Season with salt, sugar and butter. You can make a milk gravy over the corn the same as you make for green corn if you prefer it. A READER, Virginia.

The next time you dry corn, try cooking it as for the table; then cut from cob and dry. It has a fine flavor prepared in this way. MRS. J. E. M., Pennsylvania.

**Cream Puffs** for A Subscriber, Utah—Melt one half cupful of butter in one cupful of hot water, and while boiling beat in one cupful of flour; stir to smooth paste, then remove from stove and when cool, stir in three eggs, one at a time, without beating. Drop on tins quickly and bake. Use any kind of filling you prefer. (I always use whipped cream or banana filling.) Open the side of each puff with shears or very sharp knife and pour in cream. MRS. L. C. W., Ohio.

**Buckwheat Cakes** for Mrs N. E. D., Ohio—Make yeast same as for bread (I always use beer yeast). Stir in a little more buckwheat than is needed for the morning baking, then take what is left next morning to start the next evening, using dough instead of yeast. Always make a rather stiff batter in evening; next morning take out dough for starter; then add a little milk to thin batter to proper consistency. Always take out starter before adding milk as milk might sour the starter. If you haven't milk add a little sugar. The idea of either is to brown them nicely. I have baked buckwheat cakes every morning for weeks simply using dough as starter after first evening. MRS. L. C. W., Ohio.

**For Mrs. C. M. E., Ohio**—If you will send me your full name and address, I shall take pleasure in sending you the letters of help which some of our readers were good enough to contribute. EDITOR.

## Every-Day Helps About the House

Table-linen that has been stained with tea or coffee should have soft butter well rubbed into the stained portions, then wash well in hot soap-suds and the stains will disappear.

When your aluminum pans or kettles have become so blackened that you feel it is almost hopeless to try to clean them, put them in the baker when the range is hot and keep them there with a hot fire for a couple of hours, when they will look like new. If any dark spots remain, they can be easily washed away with soap and water.

All the children in our family are hard on their shoes and generally have to have them tapped once or twice before the uppers are gone. A friend told me she applied a couple of coats of copal varnish to the soles of her children's shoes and they never needed tapping. I tried it and find it one of the best economies of our household.

If you have muscular rheumatism or lameness in any part of the body, great and immediate relief is gained by rubbing on a humble home-made liniment of kerosene and camphor. It is made by taking a good-sized bottle of kerosene and crumbling into it as much gum camphor as the oil will dissolve. The odor of the kerosene is killed by the camphor.

Rip the cover off that old silk umbrella. Use the silk for a little yoke of bias strips and trimming to "let down" a half-worn dress for a child. Two umbrellas may furnish enough silk for two bias folds around the bottom of the skirt. Trim with narrow black or red silk braid and the little dress will look like new. Fasten to the bare umbrella-frame a pole five feet long. Drive pole into the ground, open frame and to each rib fasten stout twine and attach the ends to the ground by pegs. Plant in a circle, from peg to peg, morning-glory or wild cucumber seeds and you will have a pretty little arbor and playhouse for the children.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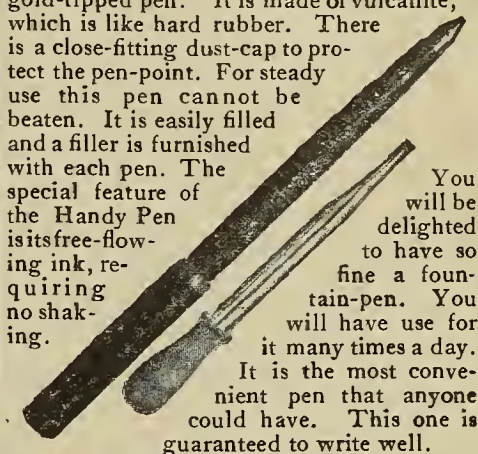

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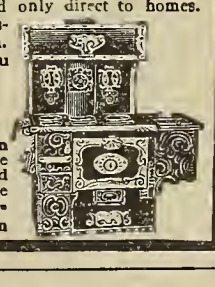

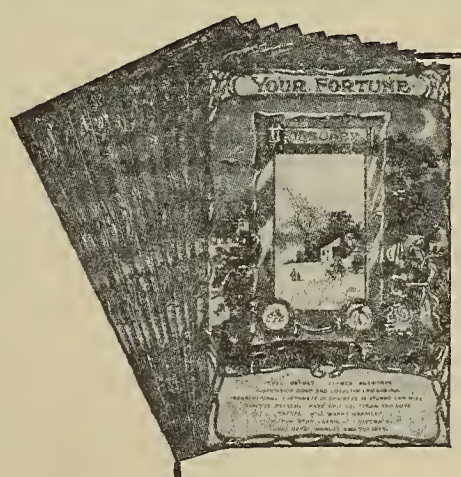


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**THESE MEN ARE REPRESENTATIVE** of all that is best and constructive in our great commonwealth. E-M-F "30" owners form a democracy of varied interests, among them being **Bankers** who know the value of money and its purchasing power—**Lawyers** who are skilled in discovering the weak points in any argument—**Tradesmen** who know how to buy for profit—**Farmers** who, as a class, are the most careful purchasers of automobiles—**Business men** in the most populous centers, who had every opportunity to draw comparisons and weigh the merits of rival cars—**Doctors** who demand the kind of car that must be always ready—at a moment's notice—to go anywhere over any kind of a road—every trade and profession—millionaires and men who live upon modest incomes are all represented in the great army of E-M-F "30" owners.

**BUT THERE IS ONE REASON** why **you** should buy an E-M-F "30" that is greater and more convincing than any one of those 20,000 reasons that made men choose an E-M-F "30" rather than any other car at any other price. And this, what we call **"the unanswerable reason"** has been getting stronger and bigger every day, from the time the first E-M-F "30" passed into the hands of the first owner, until this very moment; in fact, now, it is like some irresistible power, moving all over the land and sweeping everything before it; **we** call this invincible "reason" by a simple name everybody knows.

**"SATISFACTION."** That's it. **Each and every man who owns an E-M-F "30" is satisfied.** They are all subscribers, as it were, to the enthusiasm and interest about that proved, enduring quality and record-breaking price, which have made the E-M-F "30" the most talked of automobile in America, perhaps, in the world, because, and we say this without fear of contradiction, there is no car made upon which so many men absolutely agree. These 20,000 satisfied owners will tell you one story, simple and convincing, that they own a car they are proud to drive; to "boost," to endorse, a car, that not only backed their judgment, but above all, taught them the lesson—that it isn't necessary to decorate a check book with a lot of fancy figures and rob a bank balance to buy an automobile whose quality is in the chassis, where it belongs.

**THE HISTORY** of this universal satisfaction which, by the by, will sell another 20,000 E-M-F "30" cars this year, is the history of the E-M-F Company, an organization that revolutionized the automobile industry, not alone in values, but in methods of manufacture; that gave the buying public a car which has literally defied competition and sold itself. The E-M-F Company has always been a year or two in advance of the times. We make practically every part of our car, cast our own cylinders, forge, stamp and heat-treat our own steel and make our own bodies. Mr. Flanders' forecast, published in March, 1908, that "we can manufacture more automobiles of a better quality at a lower cost than any other concern now in existence," was a prophecy that has been magnificently fulfilled.

**WHY?** Why was Flanders' prophecy fulfilled? Ask any one of the twenty thousand owners of an E-M-F "30." He will show you his car and say, "There is the reason." So you look at it, examine it, ride in it, listen to the owner recounting its prowess, its mileage, its speed, what it has done and the magnificent way it has stood the "gaff." Because an E-M-F "30" is such a glutton for service, it sort of lures a man on to give it hard usage. Automobiles have their particular kind of personalities You get to "know" a car. What may be expected of it under certain conditions and an element of pride and friendship is established. So when Mr. Flanders' determination "to make a better quality car at a lower cost" than any other concern made or sold, took shape in an E-M-F "30," **then** also was created the "reason" of the enormous sales and colossal growth of the E-M-F Co. **The car fulfilled the prophecy.** That's why you can't purchase a second-hand E-M-F "30." Men don't sell "automobile satisfaction" when they "know" they own it.

**WE WILL EXPLAIN IT FOR YOU.** There it stands! A five-passenger touring car, graceful in body lines, with that "straight away look" which is a symbol of strength, and comfort. Not a fad or fur-below to cumber it with useless appendage. Under the hood, a 30 horse power noiseless motor that has won distinction upon race track and road. A motor so perfectly adjusted in power, weight and balance to the rest of the chassis that it creates an absolute unit of mechanical efficiency. To the expert engineer the chassis of an E-M-F "30" suggests the limit of scientific construction: to every owner it has proved it—proved it by enduring service, **for no E-M-F "30" has ever been worn out.** The ninth car built, shipped by us a little over two years ago has travelled some 73,000 miles, which means nearly 15 years of actual life crowded into the thirty months of its existence, and it is mechanically ready for 73,000 miles more. The life story of "Bullet," this famous car, can be had for the asking. When you buy an E-M-F "30" the confidence you put into your purchase is returned to you a hundred-fold.

**THE INVESTMENT OF $1000,** in an E-M-F "30" will be the wisest expenditure you ever made, whether you own an automobile or not. The most you can get for your money would be 6 to 8% interest. But here is **the car** at **the price** any man can afford. And to own a car is the ambition of every man. The automobile is a tremendous factor in our everyday life. Aside from its utility there is the pleasure it freely gives, the sense of freedom it imparts. It brings the country to the city, and makes every dwelling place a country home. At a moment's notice it is ready to whirl you and your family upon the sunlit, open road into the world of green fields—the country's life-giving "out of doors." It means **health** to the wife and children, and binds the family in closer ties. It is a tonic, nerve builder it trebles the value of time; it means recreation, the banishment of the doctor and capacity for the duties of the day—in short, it is a necessity. An E-M-F "30" will meet this necessity and excel any expectation you may now possess in the purchase of a car.

**THE OTHER DAY,** we read an advertisement that "you can buy a real automobile now for as low a price as $1500." We can take $500 **off that price** and say the same thing, for you can buy an E-M-F "30" five passenger Touring Car, standard equipment, which means **Magneto included,** for **$1000** and that's the **"realest"** automobile value you can buy anywhere.

*The Strongest Guarantee Ever Placed on an Automobile is Given With the Purchase of Every E-M-F "30"*

**The E-M-F "30" Five Passenger Standard Touring Car $1000. Roadster "30" $1000. Detachable Demi-Tonneau "30" $1050. Coupe "30" $1450. Another E-M-F "30" Masterpiece. The New Fore-Door 5-Passenger Touring Car with Full Vestibuled Body $1100. Write us for detailed specifications—Booklet No. 42.**

**THE E-M-F COMPANY Automobile Manufacturers DETROIT, MICH.**

Western Edition

# Farm and Fireside

## The National Farm Paper

ESTABLISHED 1877

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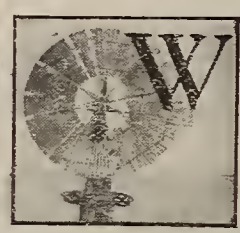
# With the Editor



When the fertility leaches out of soil, it goes somewhere, doesn't it? It goes off with the drainage-water, and it doesn't take a detective to trace it—for it always goes downhill. And the loss of the surface soil through washing—the most fertile soil, usually—goes off down the hill, too. If it can find a running stream, it goes into that, and then it is hard to follow. It may rest in sand-bars or on a flood plain, or flow out to sea, and be lost for a few million years—or until the "hunching up" of the earth's crust in one place and the lowering of it in another makes ocean of the land and dry land of the sea-bed.

And that's an awfully long time to wait for the return of lost fertility.

* * *

But if you have a swamp, which is lower than any of the surrounding land, the fertility of the drainage-water is caught, and the decaying vegetable matter that grows there is retained, and the escape of the fertility is a thing which is out of the question, for all practical purposes. One can farm and farm and farm such a place—if it is once drained—and it stays rich, if given half a chance.

As I go about the country, I see hundreds of these swales, or pond-holes, or swamps, the delight of frogs and mud-hens, and the home of prosperous muskrats, but eyesores from a farming viewpoint. I like a swamp myself. I like to lie in a blind by one and listen to the marsh-wrens, the bitterns, the rails, the kildees and the yellow-headed blackbirds, while the ducks take their time to come to the decoys—but I like the swamp to be on someone else's farm. So, whenever I see one of these depressions, full of water, rich soil and aquatic verdure, I think of some way to drain it; and often I think of the work of one windmill, which has stood for more than fifteen years on the land of the Wisconsin Agricultural College, pumping, pumping, pumping, and making farm-land of a swamp.

In the foreground of the lower picture stands the old mill—a piece of machinery with a marvelous record. Since it was put up, nearly a generation ago, it has never been out of gear save when in process of oiling, or, as once happened, when it was blown over by a great wind. The barns in the background are those of the college, where great things are being done in the way of experiments in animal husbandry.

In the upper right-hand picture, the view is along the edge of the field, and the hill covered with trees is near the lake shore. The other picture shows the

The Character of the Land Before Drainage Operations Were Begun

The Windmill That Did the Work

Formerly a Swamp, Now Valuable Farm Land, Reclaimed by Harnessing the Wind

undrained swamp. It is no lower than the plowed field, and is no wetter than the plowed field used to be, before the mill was installed and drainage operations begun.

This mill, costing a hundred dollars or so in the first place, literally makes seven or eight acres of good farm-land, worth, as farm-land, not less than a thousand dollars—of course, where this land is located, it is worth more than twice that sum per acre. Then, the lowering of the water-level here brings into prime condition more than twice as much land in addition which used to be spouty and soggy. It affects more than twenty acres of land all told.

The mill stands by a pool or sump scraped out for the accommodation of the lower ends of the drain-tile, which run in various directions under the field. All the time these tiles are bringing the water into the sump, and all the time the old mill is pumping it over a bank, into a ditch, which carries it off to the lake.

The college has bought the rest of the swamp, and will install a gasolene-engine to drain the whole tract—something like a quarter section of land—and I suppose the old mill will one of these days be taken down. One may turn out to grass the old horse, and give the old dog his soft rug by the fire and softened crusts for the saving of his poor old gums, but the old mill, as soon as it is torn down, is junk, and that is all.

* * *

I wonder if this hasn't a lesson for some of my readers? Where the water can be carried off by the lift of a few feet only, the windmill is a very efficient adjunct to the drain-tile. Perhaps the reclaimed land may need potash—but potash can be easily purchased. There will be plenty of nitrogen and phosphorus—and it won't be likely to leach. One reason why the Orientals have been able to keep their fields so rich after so many centuries of farming is that they keep most of them under water a great deal of the time for rice culture. This field is a rice-paddy—only it grows corn and grass and other standard crops.

You ought to have seen it last summer, when it was a perfect jungle of corn. You would at once have begun to plan for something of the sort for the pond-hole on your farm—if there is one. The wind can be made to do a lot of work, if we just give it the tools. No reclamation service is more cheap and effective, where it can be used, than that of which Mr. Wind is general manager and Mr. Mill, secretary. Of course, they are needed only where the place to be drained is as low as the outlet, or lower. Where there is fall enough, Mr. Gravity will work still cheaper, if we open the ways for him.

Herbert Quick

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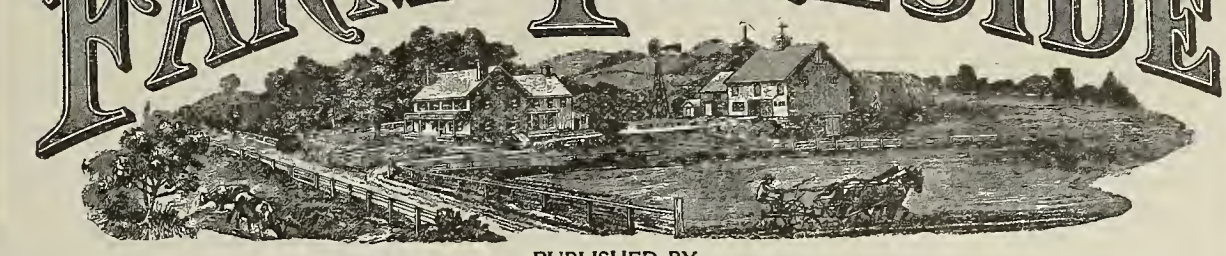
Mention FARM AND FIRESIDE when you write to our advertisers, and we guarantee you fair and square treatment. Of course we do not undertake to adjust petty differences between subscribers and honest advertisers, but if any advertiser in this paper should defraud a subscriber, we stand ready to make good the loss incurred, provided we are notified within thirty days after the transaction.

FARM AND FIRESIDE is published on the 10th and 25th of each month. Copy for advertisements should be received twenty-five days in advance of publication date. $2.00 per agate line for both editions; $1.00 per agate line for the eastern or western edition singly. Eight words to the line, fourteen lines to the inch. Width of columns 2¼ inches, length of columns two hundred lines. 5% discount for cash with order. Three lines is smallest space accepted.

# FARM AND FIRESIDE



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in the square below indicates that you are an old subscriber and that your subscription expires this month.

Renew by accepting one of our offers before they are withdrawn.

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Subscriptions and all editorial letters should be sent to the offices at Springfield, Ohio, and letters for the Editor should be marked "Editor."

Silver, when sent through the mails, should be carefully wrapped in cloth or strong paper so as not to wear a hole through the envelope.

Vol. XXXIV. No. 15 | Springfield, Ohio, May 10, 1911 | PUBLISHED SEMI-MONTHLY


It is better to plan and fail than not to plan at all.

The worst side of the fence to be on is the top side.

Father's bank account often procures a credit that ruins his boys.

A good sort of old settler is one who settles all his accounts as they come due.

If you want to make your boy like farming, set the example by word and deed.

Some farmers never trouble themselves about perpetual motion, calculating that the hired man comes as near it as is necessary.

## Cabinet Logic

WHEN a farmer fails to find a hired man who can milk, he does the milking himself. He doesn't feel that he is any the poorer dairyman, because he adopts this policy. In fact, he better proves his competency by milking, than by calling a meeting for the purpose of starting a movement for educating hired men—while the cows go dry. This is the plain common sense of the matter.

Mr. Wickersham, President Taft's Attorney-General, in a speech before the Cleveland Chamber of Commerce spoke recently against direct legislation by means of the initiative and referendum. He said that those who favor direct legislation by the people do not trust the people, because they refuse to admit that the people are able to select trustworthy representatives to act for them. In other words, if the people, failing to get good legislators at Columbus, Indianapolis, Harrisburg, Springfield or Des Moines, are advised to take up the work of making laws for themselves through the initiative, the persons so advising them do not trust the people! It is an evidence of lack of faith in the dairyman when one advises him to milk his own cows rather than allow them to go unmilked!

Isn't it fortunate that Mr. Wickersham is a cabinet minister, rather than a member of a cross-roads debating team. And that he addresses Chambers of Commerce rather than juries of just common folks? And when a Wickersham can find no better arguments than this against direct legislation isn't it about time to close the debate, and pass the law?

## Some Corn Hints

DON'T "change seed" thinking that you will get better yields. Corn is injured—one would say "shocked" if it were not for the pun—by change of place. Use the old seed until you can get better strains which are acclimated. Corn does better on the farm it is used to.

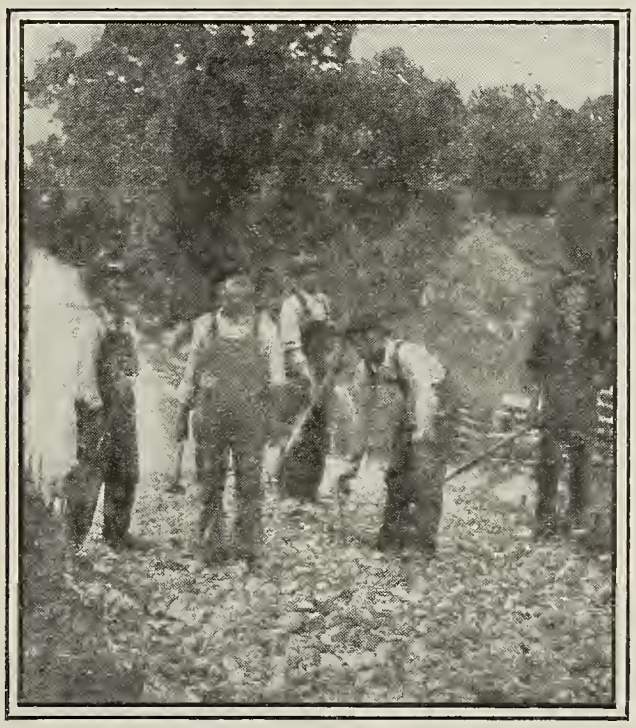
If you want to adopt a pure-bred strain, get a small amount of seed and work in gradually. In about three years the new variety will settle down and be at home with you. Raise small patches until then.

Plant from medium-sized ears of good form and well filled out. A little cob showing at the tip does no harm; but avoid the tapering tip. And don't strive to save merely the biggest ears. The big ear is abnormal, like the overgrown animal.

Don't bother about the two-ears-to-the-stalk seed. One good ear is enough—and it is better to husk than the small ears you get when there are more than one. Why bother with the multiple-eared strain, anyway? From a perfect stand of three good stalks to the hill, you would get a hundred and fifty bushels to the acre by growing one medium-sized ear to the stalk. The point is—strive for a good stand of stalks that will bring one fair ear. And this means a good strain of acclimated corn, rigidly tested seed, a finely prepared seed-bed, frequent shallow cultivation and good land. And this year try using a one-horse shallow cultivator between the rows until after the corn is tasseled and approaching maturity.

## Are We Reasoning Beings?

A CORRESPONDENT says: "When a young man, I once wrote on a strawberry box, 'Wonder how much you paid for this?' and signed my name and address. This was in Tennessee. I soon received a letter from a young lady in Detroit, Michigan, telling me that the box of berries had cost her forty cents. We had received $1.25 for the crate, or just a little more than five cents for that box." This was years and years ago. "Who gets the consumer's dollar?" is not a question of to-day, but of last century, and of to-morrow. It will be a question for the next century, unless the producers get together with each other in coöperative marketing and with the consumers in direct shipments; and unless all hands make things hot for their recreant representatives until we get the parcels post. By such steps only can we prove that we are reasoning beings.



## Good Roads Lower Cost of Living

IT COSTS you three quarters of a cent a mile per ton on the average to send your produce to market, after it reaches the railroad; and the same per ton per mile for freight on what you buy. Three quarters of a cent a mile for a ton is what the railways of the United States get on the average for all commodities.

On the average country road it costs about twenty-five cents a ton per mile to get goods and produce from town to farm and vice versa. The above picture is our editorial on how to cut that in two. If the main road to town were macadamized, fifteen feet wide, as they are doing it in the picture, it would be of the same value to you as if the railway shipment were cut down a hundred miles—if you are six miles from town. It would make a load of wheat worth three cents a bushel more on your farm—and so of everything else. It would make your cost of living lower. And think of the comfort!

Such a road costs about $5,500 per mile in most places where the stone has to be shipped in, and about $3,700 if the stone is found locally. And when it is in, it's in. Taking into account the repairs, it is cheaper in most localities than earth roads. But if you build it, build an earth track beside for use when the roads are good—and leave the macadam for the motor-cars. The earth track, when it is dry and smooth, is pleasanter for horse and man.

Woman's rights on a farm should be to have a half share in money and management.

There are pavilions for rest and recreation along the road to success; but the places for idle dissipation are along the other way.

A mistake is better than perpetual indecision.

The small farmer has sufficient grounds for intensive farming.

A good man's horse doesn't know the meaning of swear words.

When you get into the harness, brother, be sure you do not mistake the purpose of the breeching.

It seems dreadfully incongruous to hear a farmer say grace at the table, then go out and abuse his live stock. Yes, sir.

## Fashion and the Dairy

THE desire of women to be in style is a mighty force. It has made and unmade merchants. Let the women decide on green or purple, or Alice blue or Helen pink, and the fellows that have it in stock get rich. It is a force, however, that has never done much for the farmer. While we have been producing turkeys and cockerels with beautiful feathers, the dear creatures whom we all delight to buy for have demanded the feathers of ostriches and the skins of grebes and egrets. We look in vain toward Paris for a demand for feathers of the pearl guinea or the Indian Runner.

The newspapers, however, now hold out hope that the farmers are about to get something out of the demands of fashion. For a long time fashionable women have worn dogs as appendages to their wardrobe when walking in the park or on the boulevard. Sometimes they have used lizards and beetles, but the dog has held—and been held by—his own for a long time. Now, however, we learn that the Jersey calf is to be the pet, the guide, philosopher and friend of the well-equipped lady of fashion. The word comes from Paris, and must be true. Jersey calves are in the specifications, but it is confidently hoped that Guernseys and Alderneys will come in under them, and there is a chance for Holsteins and Ayrshires. Nothing is said about the dual-purpose calf.

The bossy is led by means of a gold chain. It is pointed out that the Jersey calf is just too sweet for anything, and far more *chic* and *recherche* than a dog can be. It seems to us that this is indisputable.

If this thing becomes the rage, it will solve the problem of getting rid of the little gentleman calves that have been such a problem for our dairymen. We have vealed them, it is true, but the men who have knocked them in the head on the third day have made more money. Paris comes to the rescue. We seem to see ourselves selling them to dealers who will introduce them into the most exclusive circles in the various smart sets of our cities.

Some problems will arise, to be sure; but the future may be trusted to solve them. A new pet will be necessary each season, or the gold chain will have to be exchanged for the jockey stick and the nose ring. What will be done with last year's companion? Let us trust that to the butler and the canning department of the packing houses. As for us, let us encourage the fad in all ways in our power. It may give us for a day or so at least a new and valuable dairy by-product.

## Texas Fever Beaten Back

NEARLY 140,000 square miles of the South have been redeemed from tick-fever by the work of the state and the national government working together. We may now look forward to a time when cattle may be sent back and forth from North to South with no fear of disease. The territory "cleaned up" is now as large as the three states of South Carolina, Georgia and Alabama, but is scattered about in eleven states. Stockmen may get information as to the areas released from quarantine by writing the Bureau of Animal Industry at Washington. This information is, of course, free.

# A Progressive Agricultural Heretic

## Milton Whitney's Views of Soil Fertility and Crop Rotation—By Eugene Wood

They say birds of a feather flock together, and perhaps that's why a heretic always interests me so. Perhaps that's why it seems worth while to me to tell you about Milton Whitney, chief of the Bureau of Soils in the Department of Agriculture at Washington. Assuredly, in the opinion of some of the best agronomists of the day (note the new-fangled word), he is a heretic. I do not presume to be able either to defend

My Idea of a Heretic

or to explode his heresy, but I do presume to criticize his qualifications as a heretic.

In the first place, I do not think he looks the part. My idea of a heretic is a spare, raw-boned man with hollow, burning eyes; he should have a yellowish skin tightly drawn over the cheek-bones, and shiny there; he should have whiskers, a high, glossy forehead with sunken temples, and he should have a propensity for wide-arm gestures, and a loud voice from which you'd like to get away in about half an hour. Burning heretics alive must have been annoying to many, including the heretic, but, from my experience of the breed, I can understand the origin of the custom.

Now, Professor Whitney doesn't at all correspond to the above specifications. I wouldn't say he was fat; just nicely and comfortably cushioned all around—what they put down in post-mortems as "well-nourished." His complexion is pinkish; his graying beard is short and pointed, and he's never going to be really hard and shiny bald, but just fuzzy on the top of his full-templed round head, the same as he is now. He speaks in a quiet, easy conversational voice, and can talk along and talk along, and keep your lower jaw hanging with vivid interest for—well, I was with him from half-past twelve till half-past ten o'clock that night, and the reason I didn't stay longer was not that I wasn't interested, but that my tired brain wasn't able to make a wiggle to take in new thoughts. A pint-cup can never hold more than a pint at a time.

I, for one, would strenuously oppose burning him at the stake. A drier man could be more easily spared.

### All Heretics Have Their Troubles

Nevertheless, though Professor Whitney may not look the heretic, I'm convinced he is one. For the essential nature of the heretic is to take a more hopeful view of the situation than what is orthodox. For instance, a good while ago the best authorities on the subject, who had looked into the matter, carefully declared that little babies dying unbaptised went to the Bad Place and suffered tortures for endless ages. And then the heretic came along and said: "What? Innocent little babies tossed on pitchforks from one furnace to another? Nonsense! When they die, they go straight to Glory, to the Good Man that loved them so when He was on the earth."

And then the heretic's trouble began. And to-day, as soon as ever a man takes the hopeful side, as against the gloomy predictions of "Science," his trouble begins. They don't tie him to a stake and start the kindling going, but he gets "roasted" just the same. Which is good for him. It puts him to his trumps to prove his theory, and when all's over, lo! the world has moved ahead a peg or two.

Orthodoxy in agriculture means that the phosphates, nitrates, lime and other inorganic salts in the soil, from which plants build their structures, are used up with each crop, and that, by and by, unless this "plant-food" is "put back," the soil becomes "worn out," "exhausted" and like the cupboard of old Mother Hubbard.

Professor Whitney's heresy is that he says "Fudge!" to all such fears. His deduction is that the fertility of the soil is inexhaustible; that it is a perpetual asset to us, and our heirs and assigns forever. This is the hopeful view, and, as such, it is essentially heretical.

### Figures Bear Out His Heresy

Now we are all orthodox by nature. It is more comfortable to believe what we have been told since we were knee-high to a duck than what we were told only half an hour ago. And immediately we hear that the fertility of the soil is inexhaustible, we think of an argument that will knock that new-fangled notion higher than Gilderoy's kite, something that Professor Whitney hasn't thought of, but which he should have thought of, if he had had the quick and nimble wit that we have. "Ah, but," we interpose, "soils do deteriorate under cultivation. The crop yield falls off."

Are we so sure about that?

What did this heretic of a Whitney do, when I told him that, but confront me with the official crop reports of the department, from 1866 to 1906 inclusive, and show how they varied from year to year. He didn't figure it out for me, but I myself looked up the wheat crop of Ohio, where they have been taking plant-food out of the soil for more than a hundred years. The average yearly yield of wheat to the acre in the state of Ohio for the whole forty-one years of record was 13.8 bushels. Compare that with the yield of the first decade, 1866-1875 (twelve bushels to the acre), and then compare that with the yield of the last decade of recorded wheat for Ohio (14.9 bushels). That isn't so terribly depressing.

"We have records of the wheat crop on some of the old German estates," Professor Whitney told me, "from as far back as the sixteenth century, when they got about twelve bushels to the acre. In three hundred years they have regularly increased up to two and two and one half times that amount.

In France, Belgium, Austria, England—wherever we have records for any considerable period of time—we find increase of crop-yield. That doesn't look much like 'exhausting the plant-food.'"

"Maybe they have put it back into the soil by the use of fertilizers," I suggested. "The use of commercial fertilizers—guano—didn't begin in England until about 1820," he replied. "Nitrate of soda came in about 1840; phosphate deposits were found in South Carolina in 1868, potash salts in Germany in the same year. If the theory is true that the salts on which plants feed must be replaced in the soil, then the use of this method of replacing the elements of fertility is well within the lifetime of the present generation, and the soil of Europe, which has been cropped steadily for a thousand years, in some instances nearly three thousand years, should show by analysis that it had been robbed of plant-food. I took two thousand analyses of the soils of Europe, from all over, and by the most delicate modern methods it was impossible to detect any exhaustion of those mineral elements. Comparing with these two thousand analyses of old European soils the same number of different American soils, which had been cropped only an average of fifty years, I declare to you that both sets of soils contained the same potash, phosphates, lime and all the other necessary elements for plant-life. There was no significant difference.

"The growth of a plant is not so simple as it looks to be. It isn't just a matter of taking in the salts it requires for its structure. And before you declare too positively what a plant can or cannot do in certain soils, you need to know a lot more than you do about the movement of the ground waters, which move underneath the surface for sometimes as far as five hundred miles. These carry with them solutions, soil extracts on which plants feed. And the formation of the soil itself is most complex. Not only is it made up of all kinds of rocks powdered and flaked by various agencies, but new minerals are made right in the soil itself. There are wonderful chemical powers in the soil and in the thin films of water upon the soil grains.

### The Digestive System of Soils

"There are about seven hundred distinct types of soils in the United States, but there are few signs of the profound differences that exist between them; that is, by chemical analysis. You can take a black soil, a red soil and a white soil, and you will know that the white soil will be the least fruitful of the three, yet they may be almost identical in chemical analysis. There is a deep-seated chemical—yes, biological process going on there that, so far, we don't know much about. We know that a black soil has inert organic matter in it, and that its dark color shows that it somehow has the power to digest organic matters which would otherwise be poisonous to the plant, while the light-colored soil is likely to retain such poisonous substances. It doesn't break them up so rapidly. It's just like people. Some can eat a heavy dinner of pork and top off with mince-pie, and get away with it. Their digestive system can break up the compounds, extract the nourishment from

From One Furnace to Another? Nonsense!

them, and then break up and cast off the refuse from that, without injury, whereas other people would be poisoned by the same meal. They have to live on a light diet. And sometimes the hearty digestion gets out of condition."

"Then you think the soil gets out of condition for a particular crop?"

"If you follow wheat with wheat and then with wheat again, you reach the point where wheat will refuse to grow in that soil. And to follow wheat with oats has nearly the same effect. The 'plant-food' has not been exhausted, for without putting any more into the soil we can grow other crops on it which do not mind what the wheat-plants have left behind them, or are even better for it; and after sufficient time has elapsed to allow these toxins of the wheat to break up into harmless compounds, we can grow wheat again. A soil can become 'wheat-sick,' or 'flax-sick,' or even 'cow-pea sick,' as a result of the excretions which these various crops have thrown off and left in the soil, and yet have plenty of plant-food left in the soil. That is why we have rotations of crops and fallowing. That, also, is why we have fertilizers, stable manures, green manures and commercial fertilizers, not primarily to put back into the soil what has been taken out of it, but to decompose the toxins, or poisonous substances, left by preceding crops."

### The Professor Can Prove His Points

"Your theory is, then, that a crop does not rob the soil of plant-food so much as it poisons the soil against a repetition of the same crop. How do you know it poisons the soil?"

"Come on with me." We went into the laboratories, where they are experimenting with soil-extracts. You know that the earth itself holds the plant upright; what the plant lives on is the watery extract of the soil. The rock-powders dissolve in water. Even glass will dissolve in water if it is made into a kind of flour. In the laboratories they sprout wheat and put the plantlets into bottles of this or that soil-extract, the stalks coming up through holes in the corks in the wide-mouthed bottles.

"Now, here," said Professor Whitney, "is the extract of an infertile soil. Notice that the roots look as if they didn't care much about living. They're kind of blunted at the ends. Quite different, you see, in looks from the lively roots on the plants in this bottle. Now, suppose we take this extract of an infertile soil and filter it through the lampblack that we get from burning natural gas. We haven't added anything to the extract. If anything, we have taken something away from it. But the wheat-plants will then thrive in it as well as in the extract from a fertile soil. It wasn't the lack of plant-food in the soil-extract, but an overplus of

[CONCLUDED ON PAGE 24]

The Professor Doesn't Correspond to the Specifications

# "The Best Tool I Use"

## A Page by Farmers Who Work With the Best Tools and Study the "Know How"

## The Wheel-Hoe and Its Attachments

HERE are the best letters telling of the writers' preference for the wheel-hoe, with its various attachments and combinations, and how to use them:

Taking into consideration the size and cost, the wheel-hoe is the most useful tool used on a truck-farm. I find at least twenty-five ways for its use, and there are lots of truckers that don't know how useful it is. They think, because it is so small, it is a play tool, but to me it is worth ten men a day.

Figure on that and you can realize its worth. Taking celery-plants for example,

A Tool "Worth Ten Men a Day"

the weeds will come up and be well on their way by the time celery comes up large enough to see. I take one cutter and adjust hoe so that I can work one side. I can cut weeds away as close to the plants as you can cut them with a pocket-knife, leave very few to pull out, hoe as fast as five men with hand-hoes, and cut as many more weeds away as would take five more men to pull out, all without injury to plants.

Another great use for the hoe is for cutting spinach. Adjust hoe with one cutter, the same as for hoeing celery, and you can cut spinach as fast as two men can pick it up and put it in boxes.

O. C. EGERTON, Maryland.

* * *

Our choice over all other farm tools used is a combined double-wheel hoe, single-wheel hoe, and hill and drill seeder—three distinct and thoroughly practical implements combined in one. After the soil is thoroughly pulverized, this tool is used in its seed-drill form for planting all the principal garden-seeds, either in hills or drills. In one operation it opens the furrow, deposits the seeds, covers them and also rolls the ground.

The wheels are large, which makes it easy to push. The seed-sowing device is simple, yet very effective. Nearly all garden-seeds are sown very evenly by it in hills or drills.

We change from a seed-drill to a single or double wheel-hoe to work the plants when they appear through the ground, and we can work very close to the plants without disturbing them. This tool enables thorough cultivation of the garden at an easy walking gait.

As the plants grow, we discard the rakes and side hoes, and put on the cultivator teeth, as we want deeper cultivation. Later in the season, we sometimes use the plows astride the rows to throw a slight ridge of soil against the plants.

J. E. ELLIOTT, Pennsylvania.

* * *

My best tool is the garden-plow or wheel-hoe. It has four tools combined on one high wheel with mold-board plow, so that you can open a furrow across the garden to plant peas, and then turn a furrow over them.

I have never found a garden drill that could do the work as satisfactorily. Then there is a rake attachment, also a double-shovel plow. Then last comes the weed-hoe, a blade about eight inches long that clips off the weeds just under the surface and at the same time loosens up the ground and leaves it in fine condition. They all scour, and a ten-year-old boy can run any of them.

O. P. MILLER, Iowa.

* * *

The best tool I use is a Planet Jr. single-wheel hoe. I am a woman farmer, and have all my work to do myself, but I have generally raised a large garden every year. Until May, 1910, I hoed, finger-picked and went down on my knees in the hot sun trying to keep my garden clean. Yes, trying, that was all, for in this damp climate it cannot be done with a common hoe. But last year, after planting about one and one half acres of garden, all in nice long rows, I decided I could never keep up with my work and tend the garden, so I bought a plain single-wheel hoe, no seeder or combinations to get out of order, simply with two hoes, three cultivator teeth and one dandy little plow. It is just the thing to lay off those long rows with this year, too.

It Operates at an Easy Walking Gait

Just think, I went over that whole garden with the hoe first, just as soon as the tiny weeds began to show, then in about a week I went over it again, this time with the three cultivator teeth, and after that I never found any weeds. But I used the hoes or teeth every week just the same, and my garden was the talk of everyone who saw it. I paid five dollars and seventy-five cents for my hoe, and in July I sat under the "Old Apple-Tree," in the cool shade, and peeled and dried six dollars and eighty cents' worth of apples while I watched my garden grow, instead of digging at those weeds as I had done all my life before.

MRS. JESSIE BOUGHTON, Oregon.

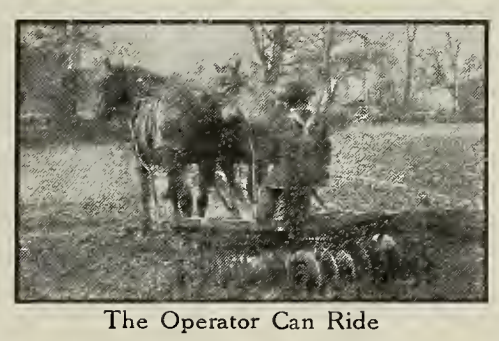
## The Disk-Harrow

FOLLOWING are the five best letters on the disk-harrow and its various uses in widely separated parts of the country:

My favorite farm implement is the disk-harrow, because it can be used from A to Z in the farming alphabet.

As a pulverizer of the soil and weed-destroyer it has no equal. Double disk the land for oats in the spring by overlapping one half of the disk—this is preferable to plowing. Sow with a press drill if possible. Alfalfa disked lightly each spring is greatly benefited. Bare places in meadows and pastures can be disked, then seeded, which is the most convenient method of securing a uniform stand of grass in such places. The disk also excels in preparing a seed-bed for potatoes.

A good sharp disk is as efficient in cutting stalks as most stalk-cutters. Fall-plowed land thoroughly disked in the spring makes and ideal seed-bed for corn. On a cloddy plowed field that is hard to work up, the disk can be used to best advantage. Land that is ready for the planter often receives hard,



The Operator Can Ride

dashing rains, packing the soil, on which the disk can again be used with excellent results. Immediately after removing the oat or wheat crop, disking the land assists greatly in conserving moisture.

In the West, wheat is often put in after wheat or oats with no other preparation of the land than disking. The disk is unquestionably the "farmers' friend" and the most effective and satisfactory tool found on the farm.

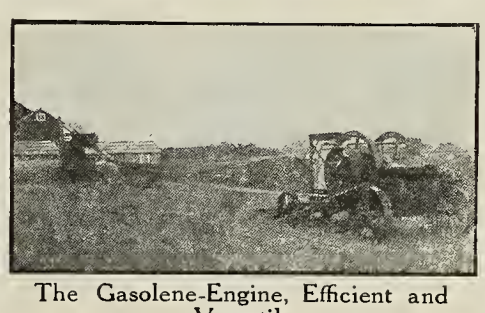
M. R. DEMOULIN, Kansas.

* * *

If there is one tool that I find more indispensable than another, it is the disk-harrow, and for these reasons:

First: Its great durability. A well-made disk-harrow has no parts that are liable to break or wear out quickly. The disks are made of a fine quality of wrought steel, and stand a wonderful amount of wear and abuse. I never knew one to break. In case the edge of a disk becomes bent by thumping against boulders, all you have to do is to hold a sledge against the concave side of the bent portion, and strike the other side with a hammer, and back it goes into shape. The bearings, if kept well oiled, will endure an immense amount of work, but never let a harrow squeak for a longer time than it takes to drive around to your oil-can.

Second: It is adapted to many kinds of work. For slicing, stirring and fining sod ground it has no equal. After you have plowed a field and wish to put it into oats or wheat, if you have no smoothing-harrow at hand, you can run your disk-harrow over the piece at different angles, and with that and a plank crusher you can make a very fair seed-bed. Many farmers fit their potato-ground for oats without plowing. If the season is not too dry, oats do about as well on land prepared by a disk as they do when it is plowed.



The Gasolene-Engine, Efficient and Versatile

Third: The operator can ride, and this is quite an item to us older fellows.

Fourth: The disk-harrow is easily moved from one field to another.

E. L. HINMAN, Ohio.

* * *

The disk-harrow is my favorite tool. It does many things besides pulverizing the soil and mixing the fertilizer, though these are two important points.

The ground should be harrowed from north to south and from east to west, over and over again, till the soil is fine, mealy and mellow. With plenty of harrowing, one may be sure that the sunshine and air have thoroughly penetrated it and given it new life. Old land particularly must be aërated to get this new life.

GEORGE O. LOWELL, New Hampshire.

* * *

You ask what is my favorite tool, and, unhesitatingly, I proclaim the disk-harrow the most useful of all. With the disk I prepare fall plowing for spring crops; I disk my stalk-fields in spring, thus cutting the stalks and at the same time pulverizing the surface. Again, I use the disk to run over my alfalfa-fields in early spring to loosen the soil and split the crown in order to thicken up thin spots.

Except in sod, I can prepare soil for any crop better with disk alone than with plow alone.

E. W. BOWMAN, Kansas.

* * *

My favorite machine is the double disk-harrow, for these reasons: First, it leaves all straw, weeds, manure and rubbish of any and all kinds where it finds it and does not drag and pile anything up in the way of planters or drills. The next best point about a disk is that it will work equally as well on rough land as on smooth, comparatively speaking, for nothing seems to be in its way. It will roll over a stone or obstruction of any kind and hardly make a skip.

It works every bit of the soil at one cultivation. I can do more thorough work by one cultivation on stiff sod than by three or four cultivations with any other harrow that I ever owned. Then put it in a field where corn has been tramped down by sheep or hogs. I raised eight hundred bushels of oats last season on eighteen acres that was said to be too poor to sprout oats. I did it all with the disk-harrow and drill; never plowed an acre of the field.

Then take it in a young orchard, and a man that is a good driver can do wonders. It will cost less for repairs than any machine on earth for the amount of work performed. It will last almost a lifetime with reasonable care. I would not know how to prepare a field for corn any more without a disk-harrow. Here is a picture of a field of fifteen acres of corn that I prepared with the disk

The Field Mentioned by Mr. Mills

that made thirteen hundred bushels of number one shelled corn.

S. A. MILLS, Ohio.

## The Gasolene-Engine

THESE are the best letters on the gasolene-engine and a few of the many uses to which it can be put by ingenious operators:

The tool I like best is the tool that will produce the most clear profit or its equivalent in money saved. In my opinion the most useful tool a farmer can own is a gasolene-engine. Three years ago last October, finding it almost out of the question to obtain help, I bought a five-horsepower I. H. C. gasolene-engine and geared it to a circular saw, a feed-grinder, a grindstone and later to a home-made cider-mill.

In a half day's time we can cut enough firewood to last over a month. Then, if there is still gasolene in the tank, in five minutes we can oil the engine and be grinding feed. In twenty minutes a sack of feed can be ground.

The engine can be run ten hours on three gallons of gasolene and do an immense amount of work. My twelve-year-old son and I could run many other things if we cared to gear them onto the line-shaft, such as corn-sheller, washing-machine and cream-separator.

I have never needed any expert to repair or readjust anything. Of course, there have been times when we would almost despair at finding the cause of a "balk," but by perseverance thus far we have been able to find the cause.

J. M. OFFUTT, West Virginia.

* * *

Some years ago I purchased a small gasolene-engine principally to saw up my wood. I was then sixty years old and had always sawed my wood with a buck-saw. Those who have run a buck-saw will be able to judge of the amount of satisfaction it was to me to have a power saw.

Then I bought a bone-cutter and belted onto that. I need not say what the value of that is to those who have fed green-cut bone and meat to their poultry. I turn the grindstone the same way, and also have a tool for making spokes and ladder rounds, all run by the same engine. The uses which can be made of gasolene-engines of various sizes are almost unlimited if a farmer is handy with machinery.

C. M. VAUGHAN, Maine.

## Much Obliged!

FIRST we want to thank our readers for their hearty response in helping us make this "Best Tool" Department a pleasant reality. As was expected, we were "snowed under," and our only regret is that we have not space for all the letters.

The best ones and those first received have been given preference. There will be several more instalments of the "Best Tool I Use," dealing with new subjects, new experiences and new tool wisdom. Tell us how you like this department.

## The Mold-Board Plow

FOLLOWING are the best letters descriptive of the merits of the mold-board plow, with reasons for the writers' choice:

Of the many farming tools I use on my farm, I prize the turning-plow above all others. No tool can take its place. Neither can any other tool be used to advantage without first using this king of all tools. Where is the farm where this tool is not used? Nowhere on the civilized globe.

I know of no work on the farm that has more fascination than to walk behind a good pair of mules, hitched to a good turning-plow, and watch the rich mellow earth roll from its silver-like side and fall into thousands of particles, ready to be made into a perfect seed-bed for any plant on earth.

Laying the Foundation for all Pursuits

I use the Oliver South Bend plow, which does perfect work for me. Of light draft, strong and durable, never failing to do the best of work, always turning soil under any and all conditions, burying trash and stubble to make more humus to make our fields more fertile, and at a depth to hold sufficient moisture for our growing plants—these are a few of the merits of my mold-board plow.

To have and use such a tool is a pleasure and a profit. Rightly used, it makes life to me seem like one long, sweet summer day.

J. H. HARDISON, Tennessee.

* * *

There are lots of tools on all farms that the farmer could not very well get along without. But the question comes right down to me, What is my—not the other fellow's—favorite tool? Well, my plow is the best tool. With it I can plow my ground, and if I did not have a harrow, I could drag it down; if I did not have a planter, I could broadcast the seed. In a pinch, I could do without a cultivator, though that would be a poor way to farm. But without the plow I could not farm at all.

H. N. KERR, New Mexico.

* * *

The best tool I use is an iron-beam, fourteen-inch, double-shin, walking-plow. By "double shin" is meant that the mold-board is of double thickness. It is highly tempered on the outside, but has a soft center. A good team to a good plow is more than half the battle when the plowman does his part well by knowing when and how to plow.

I seldom plow when the soil is either very wet or very hard. Since good plowing is essential to proper cultivation and a good crop yield, other conditions being favorable, I am fully convinced by actual experience, reading and observation that a vast number of farmers fail to make good, due to poor plowing, which in many instances is nothing more than shallow or surface cultivation.

L. E. VARNER, Missouri.

* * *

The best tool I use is the plow. The drills, harrows and harvesters are good in their line, but first and foremost comes the breaking-plow, which is the foundation of agriculture. The plow is the only cultivating tool we have which stirs the soil deep and turns it over. The disk is good, but we can't disk our ground year after year and raise a crop of corn.

Good plowing is the first and most important step to profitable farming.

W. H. DUNCOMB, South Dakota.

## The Spike-Tooth Harrow

THE following is the best contribution received, in which preference was expressed for the simple, but effective, tool, the spike-tooth harrow:

I find upon a farm of twenty-five acres, where both fruit and field crops are raised, no tool gives me so much service as a spike-

Takes the Place of Both Weeder and Cultivator

tooth harrow with lever attachment. I buy it in two sections and then use one section upon smooth ground and the other upon stony ground. This tool at times takes the place of both weeder and cultivator.

After my potatoes and corn are planted, I begin at once to harrow and thereby catch the weed rootlets while they are still under the ground. One may also go over the corn and potato field after they are up, by setting the teeth slightly back.

Sometimes, when the plants are too large, I take out one row of teeth from the harrow and use it instead of a cultivator, getting the grass and weed rootlets in the row, as well as between the rows. If one has an alfalfa-field that needs a little stirring up, nothing is so convenient as a spike-tooth harrow with the teeth set at an angle of about forty-five degrees.

S. VAN AKEN, New York.

[CONCLUDED ON PAGE 7]

# Coöperation—Just Help Each Other

## R. E. Rogers Tells of Practical Coöperative Enterprises in Wood County, Ohio

"Just help each other." Those four words contain the essence of the coöperative idea. We quote them from a letter of one of our Ohio subscribers, Mr. R. E. Rogers.

There is nothing novel about the coöperative principle. The ancient adage, "In union there is strength," hits it off exactly. Æsop wrote at least two fables around the thought of coöperation—though he didn't call it that.

We are hearing a great deal just now about what might be called the defensive side of coöperation. We are told, and with truth, that we cannot cope, as individuals, with the interests that control the avenues of trade, and which are continually becoming better able to dictate what the farmer shall receive for his product and the city man for his labor, and, further, to fix the prices of the articles both country man and city man must buy.

### Coöperation More Than a Defense

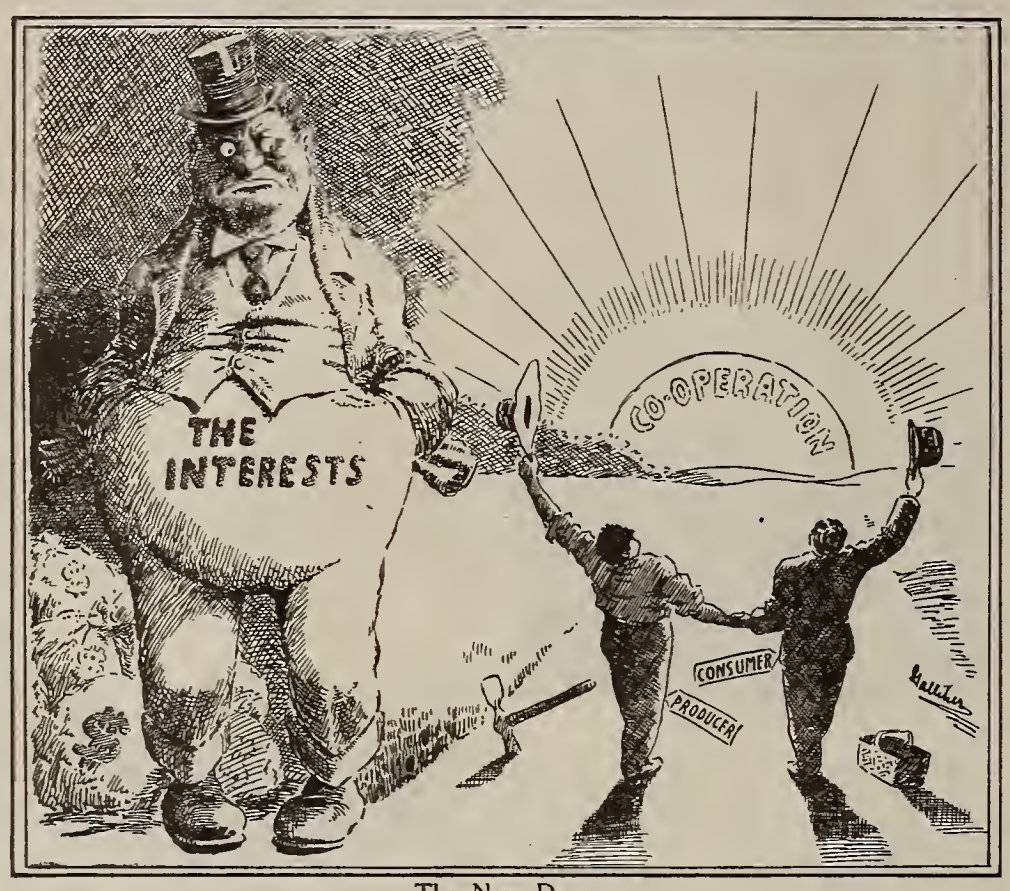
The individual fruit-grower, for instance, is at the mercy of the buyer, railroad or commission man. But fruit-growers, banded together in an organization like the California Fruit-Growers' Exchange, can sell on vastly better terms—in fact, they can brush the middlemen out of the way, and deal on something like equal terms even with the railroads.

But coöperation is more than a defensive system. It is a rare good way of getting the world's business done. The California Exchange, for instance, puts fruit upon the market more judiciously and with infinitely more economy than was possible when growers sold their fruit separately and its ultimate marketing was left to individual enterprise.

Whatever hope large-scale coöperation holds out for the future, neighborhood coöperation is a proved success in the present. Its benefits reach beyond its immediate returns, for, by getting together on road-making or ditching or buying the winter's coal, farmers learn the trick of larger coöperation on a larger scale—stock-breeding associations, marketing associations and insurance companies.

A good many thinking men believe that coöperative organizations will not only be able to resist, but to even replace many business agencies now controlled by individuals, or, through corporations, by the combined capital of a few individuals—simply because coöperation is a better device for carrying on certain businesses.

In a recent issue, Clyde A. Waugh told how informal shipping associations can be organized. Now comes Mr. R. E. Rogers, who has already outlined in Farm and Fireside the success of one coöperative undertaking, with this new account of further applications of the principle, in Wood County, Ohio. The Editor.



The New Dawn

Mr. Rogers writes as follows:

Coöperation fails because of the individuals composing the organization, not because of any fault of the idea itself. The Washington State subscriber, who, some time ago, wrote to Farm and Fireside that he had lost out on several coöperative concerns, either must have been reckless in going into undertakings planned on unsound business principles, or else he hit upon a band who decided to take advantage of his inexperience. Our neighborhood and county and township are, it is true, rather slow to take up progressive and up-to-date ideas, yet, along lines of mutual saving of time, annoyance and money, we are not entirely back numbers. For instance, as described in Farm and Fireside of October 25th, our county Mutual Fire Insurance Company was, and is, a success.

Some years ago the stock farmers of our section invested in a high-grade draft stallion. The owners were farmers and paid nearly an equal share all around. Since then the stallion has been sold, yet not until the entire neighborhood besides the owners had had the advantage of a better grade of young colts than could have been possible by the old five-dollars-per-colt system. The company charged twenty dollars service fee and had the exclusive business of the whole section.

The stallion did not sell for as much as he cost, being about eight years old when sold. Yet these farmers are optimistic, for they believe that the advance in the grade of stock, as a result of this stallion, will more than pay them, for they believe that colts selling at from one hundred and fifty to two hundred and fifty dollars at three years are a deal better than colts valued at one hundred to two hundred dollars at three years, such as were produced under the old order of breeding.

### Road-Work and Coal-Buying

In our township it frequently is necessary to clean or deepen an open roadside ditch about one and one half miles in length. Through coöperation we had a surveyor, working under the supervisor, apportion each man's share as near as possible; then each owner who is benefited goes ahead and does his part of the job. Mighty sight better than getting the commissioners after the work. Don't you see?

During the past few years several of us have been buying our winter's supply of soft and hard coal through a local farmer and dealer, by stating to him what each one will take. He orders for the bunch, and we all get the benefit of wholesale prices, yet buy in retail quantities. Of course, it does not pay to go into such a deal without thoroughly investigating it beforehand.

### Neighborly Exchange of Machinery

Our fair association is composed of individuals who are directors or stockholders in the company. This fair is a success in every way and is growing each year.

Coöperation does not always mean many in number working for one gain. Two or three farmers can be of mutual advantage to each other in many ways. One farmer, whom I know, owns a mowing-machine, has considerable hay to harvest, but very little corn. His neighbor one half mile away has not enough use for a mower to justify a purchase of one for himself. As a result, the first man uses his neighbor's planter when possible, while the second man has the use of a mower whenever it isn't in use. This saves buying a machine for each man, besides the almost as important point of keeping the extra machine sheltered.

Yes, it pays to help each other.

# A Story and a Lesson in Farm Economy

## How We Learned by Sad Experience the Value of Good Fences—By R. H. Brown

When we bought the new farm and brought our personal belongings from the half-section which we had been renting during the previous years, we laid our plans to do as little temporary work as possible. We said, when a fence was to be built, or a building erected, or even an "A" coop for a brood of chickens to be made, "This is to be made good enough to last," thus intending to avoid the everlasting repetition of the same old jobs. In the main, we have adhered to our good resolutions, but, unfortunately, like all farmers, we had accumulated a great amount of old plunder that always seemed too good to throw away, and yet was unsalable. So we carried it along to the new farm in Minnehaha County, South Dakota.

### Our Good Intentions Yield to Economy

New material was expensive, and, as there was constant need for more and more of it, we gradually yielded to temptation and in a few instances tried the experiment of making a "new coat out of an old sheet," always with disaster in the long run. We had a large herd of registered Poland China swine, and they had to be provided with permanent yardage. We started in bravely to adhere to our plans. We sunk corner posts that will stand for a generation and used the best quality of cedar posts for all intervening points required to fence nine parallel yards, containing, altogether, five or six acres of ground. The west half of each yard contained a portion of a good twenty-year growth of wind-break timber. In each yard we set up one or two individual well-floored houses, ideal, you will say, and so it would have been had we not at this point yielded to temptation.

In our rubbish-heap was a lot of twenty-inch woven wire. We had no other use for it and it would cost forty cents a rod to buy new forty-inch wire to put on those posts. Our twenty-inch wire was in good condition, and so we put it on and spliced out the top with barbed wire, also on hand. When the fence was completed, it looked good and was good until it was really needed, and then, like all patch-work, it failed us ignominiously.

### Pedigreed Pigs to the Pork-Barrel

The snows of winter drifted into those yards, raising the footing of the swine one half the width of that woven wire, and the hogs went out over the top of the other half and under the barbed wire. No tightness of stretching availed, and the swine went through. It was impossible to hold the groups separate when they took a notion to mingle.

Brood-sows took meals with fatteners, young boars went the length of the whole pasture, picking at will where they would spend the night, the old herd boars got together for an occasional battle and only by chance were serious injuries averted. One of these, from injuries in fighting, had to be cooped up in the barn for months, occupying room needed for other stock.

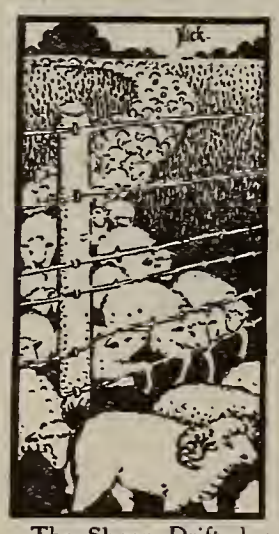
A few fine boar-pigs that ought to have sold well as breeders had to go to the pork-barrel or be sold at a reduced price to a possible purchaser who did not care for a certified pedigree—and all this to save the cost of a little new wire that at once would have properly confined all. We paid very dearly for our economy.

### The Direct Losses Were Not All

I have spoken as though this all occurred in the winter, but not so. It started then and taught the whole herd that there was an elastic opening twenty inches above the ground, and each sire and dam since that time seems to have proven enormously prepotent in transmitting that idea to all progeny. The adjoining fields have shown the effects of it in the ravages upon the growing grain. The direct losses enumerated above were by no means all, for the time, temper and profanity expended in righting each individual wrong ought to count for something, and the sum total was many times over the hoped-for saving in cost of wire.

I cannot refrain from giving another illustration of the same point. We introduced a flock of three hundred sheep upon the farm. We had a splendid new four-wire fence around the pasture. We had been told that by moving up the bottom wire and putting two more below it would hold sheep all right. This we did, and then between the pasture and an alfalfa-field we moved two wires and put four more below, stretched as tight as fiddle-strings.

When it was finished, we stood off and admired our handiwork, pronouncing it good. But, oh, the vanity of earthly hopes! The sheep just drifted through that fence like a blizzard in winter, leaving just as many white flakes behind. We practically lost a cutting of alfalfa and one half the yield of about ten acres of oats, besides much time in getting them back into the pasture; all this before we could get time to put on the necessary woven wire.


The Sheep Drifted Through the Fence

Now the incidents in themselves are all unimportant, except as a lesson. I do not hope to reach the old farmer, for he has either learned long ago or is hopelessly beyond learning, but I do hope to reach the new man, the young man, or, rather, the man young in the business. To such let me say, "Don't half do things. Don't try to save, when you face a certain loss by doing so." I am convinced that right here, in the half-doing of things with improper materials, is one of the greatest leaks in farm economy.

# "The Best Tool I Use"

[CONTINUED FROM PAGE 5]

## The Disk-Drill

MR. A. B. DWIGANS sends the following letter expressing his preference for the disk-drill over all other tools:

The disk-drill puts the grain in the ground at a uniform depth, shallow or deep, as you desire. Drill north and south, and the sun can shine between the rows. This gives grass-seed a better chance to start and grow when the grass-seed is sown between the rows of grain. Grass-seed can, however, be sown in the tracks of the disks for renewing old or thin pastures.

By moving a hand lever the grain is shut off and the disks are raised by "horse lift," which makes easy turning. Grain is drilled from seeder-box through spouts into the ground back of the disks. Therefore, less seed is required than the way grain is usually sown.

One can do disking with the drill to prepare the seed-bed, but this is not advisable, as the disks are at a stationary angle, and the axles of the disk have a short-wearing bearing. The drill I use is made with the

The Disk-Drill Seeds and Disks at One Operation

disks placed in two rows. This leaves such a wide space that trash does not gather between the disks.

Since using the disk-drill, I raise larger crops to the acre, due to a better way of seeding. As the seeding and disking is done at one operation, time is saved. These are the reasons for my preference for the disk-drill. A. B. DWIGANS, Iowa.

## The Hand-Hoe

HERE are two letters, one from the Buckeye State and one from the "Show Me" State, giving reasons for the choice of the hand-hoe:

Old-fashioned, oft-neglected, sometimes scorned, but ever-useful, hand-hoe!

There are cultivators; horse-hoes and wheel-hoes, but none can give the finishing touch, the completeness of cultivation that furnishes the supreme nourishment, equal to the work of the old hand-hoe.

The many and various shapes and forms of the hand-hoe, and the various patterns, make it a whole kit of tools in one, weighing from two to five pounds and costing from thirty-five cents to one dollar and twenty-five cents.

The Hoe Supplies the Finishing Touch

With it one can wholly prepare any small amount of ground, so it is possible to do without the horse tools, the spade and roller, too. But, if all these tools were used, the hoe is, nevertheless, the best to finish and round up the job. After the autumn's busy routine work is done, the same useful hoe may enlist for a winter's campaign in mixing the slop for hogs and mash for cattle.

JOHN A. SHEFFIELD, Ohio.

* * *

You ask, "What is your favorite tool?" My answer is, "The hand-hoe."

Do I accomplish anything by use of the hoe? The crop I raise will answer that question. Last season I sold 3,300 quarts of berries at twelve and one half cents per quart. This was from an acre. My onion crop from one half acre sold for one hundred and sixty dollars and proceeds from other garden crops were equally satisfactory.

You can see by the crops I grow that it is very necessary that I use a hoe, and as I like to hoe, it is but natural that it would be my favorite tool—as FARM AND FIRESIDE is my favorite paper. J. E. HALL, Missouri.

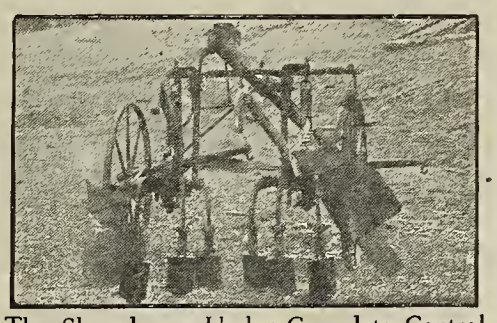
## Headwork Awards March 25th

B. F. Reinhart, - - This Gate Shuts Itself
Mrs. J. T. Burton, - Curing a Self-Sucker
Howard W. Foster, - Down Bossie's Throat

## Two-Horse Walking-Cultivator

THE favorite tool of a Wisconsin contributor is the two-horse walking-cultivator for the reasons following:

A two-horse walking-cultivator, three and one half feet between wheels, can be used



The Shovels are Under Complete Control

any place that a horse can be used. By the use of the shields the tiniest plants can be cultivated. By the use of a board riveted to the front and bottom of shield (see arrows in picture) beets, carrots, potatoes, melons or any other plants can easily be cultivated. The board is arranged so as to project ahead of shield and even with bottom, coming to a point about four inches from shield.

This cultivator works equally well in corn, almost hoes it, for each set of teeth are independent of the other and are easily handled by the operator.

WILL STRATTON, Wisconsin.

## Spraying Outfit

MR. T. E. GOODRICH, after looking at his fruit business in a broad way, makes the following choice:

My favorite tool is my spraying outfit. I have mowers for the grass, rakes to take it up, plows to break the ground, special tools to cultivate the asparagus, the sweet potatoes and the tomatoes. But the tool that makes me the most money in the shortest space of time is the sprayer.

Worth Fifty Dollars a Day

I have wagons to haul off the peaches and apples, but there would be none to haul if the trees had not been sprayed. The sprayer is used only a few days in winter and a few weeks in the spring and summer, but it is the one tool that is indispensable.

Each going over the orchard nets me one hundred dollars. It is the only tool that nets me fifty dollars for every day it is used, which leads me to say, "My spraying outfit is my favorite tool."

T. E. GOODRICH, Illinois.

## The Handy Wagon

MR. C. W. RANSLOW expresses his preference for the handy wagon, as follows:

On my Missouri farm no tool or implement is of more general convenience than the low-wheeled wagon. It is an ordinary farm wagon with all four wheels cut down to thirty-eight inches. For any kind of hauling around the farm it is far superior to the high-wheeled wagon.

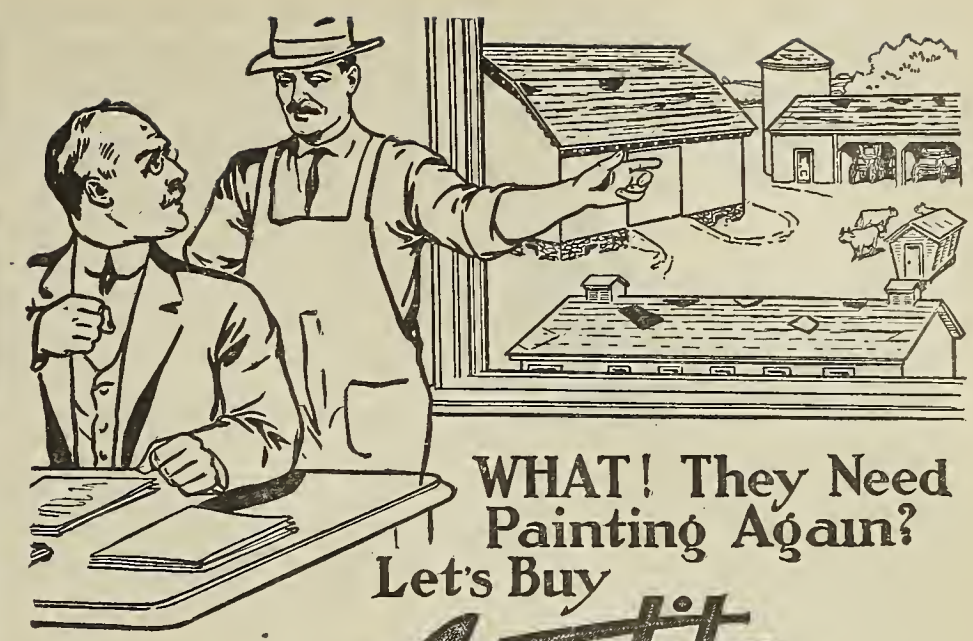
For hauling hay, grain or fodder we have a rack which, as it has no wheel-houses and is near the ground, is very easily loaded. I haul hay, grain and fodder by myself and

Mr. Ranslow's Handy Wagon

can get as big a load and do it almost as quickly as two men can get a load on a high wagon. With help as expensive and as hard to get as in these days, the saving of one man's work is a consideration of no small amount.

For hauling logs we have a rack which can be adjusted to suit logs from eight to eighteen feet in height. With this rack the largest logs can be loaded and unloaded quickly and with no hard lifting.

I choose the low-wheeled without hesitation. COURT W. RANSLOW, Missouri.

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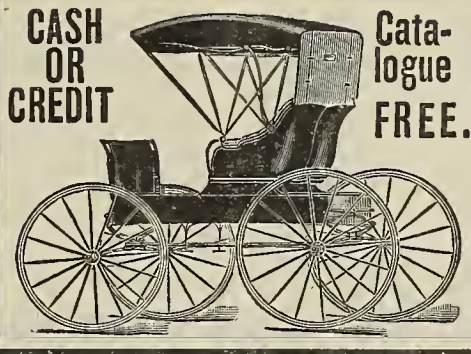

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GAL-VA-NITE is for sale by most lumber dealers. (Look for the sign "Ford's Galva Knight.") If the dealer in your town has no supply, write us and ask for "The Inside Of An Outside Proposition."

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# Garden and Orchard

## A Cucumber Kink

TRY planting some cucumber or melon vines near the house. Take old tin cans, punch several holes in bottoms and sink about four inches deep in the center of each hill. In dry weather fill the cans with water each evening, and you will be surprised how the vines will repay you for your labor, since the system trains the roots to grow downward after water.

Pouring a small amount of water on plants in dry weather does more harm than good. It not only bakes the ground around the plants, but it also has a tendency to make the small roots feed near the surface, instead of sinking deeper in the ground.

MRS. C. W. BEYER.

## How to Fight the Pear-Slug

MR. H. M., North Vernon, Indiana, sends leaves of a cherry-tree skeletonized by an insect, probably the pear-slug. Its eggs are laid in small holes punched in the under side of the leaf, and the "slugs" or larvæ feed on the tissue of the leaf. There are usually two broods during each year. The first appears just before the fruit ripens, the second along in August in the Central States. The injury causes the leaves to drop prematurely.

This slug is easily controlled by spraying with arsenical poisons or by dusting with air-slaked lime. Care must be used not to use too strong poison solutions on cherry-trees, owing to their tender foliage. Better mix and spray a few branches as a test before spraying extensively. B. F. W. T.

## Strawberries on the Farm

RED, ripe strawberries, with the dew of heaven still on them, a spoonful of sugar and, on this, cold, rich cream right from the milk-house; can you imagine any dainty more delicious for breakfast than this? A famous and much-quoted remark is to the effect that "Doubtless God could have made a better fruit than the strawberry, but He never did."

Many people have an impression that it is very difficult to grow strawberries. They are as easily grown as any garden crop. There are many ways, such as the hill system, the hedge-row and the matted row. I shall only deal with the matted row, which is the method I use. While this method does not give the largest berries, yet it gives immense quantities of good-sized berries and gives the largest returns for the amount of labor involved.

Have your ground well worked and mellow. Use land that was cultivated the previous year, the more fertile the soil, the better, but do not use fresh manure; it is full of weed-seed. Manure should be applied to the previous cultivated crop.

Smooth with a drag. Mark rows three and a half feet apart and set plants eighteen inches apart in the row. Cultivate regularly, keeping out all weeds. Allow the vines to gradually spread, training the new runners to occupy the vacant spots until they have formed a matted row eighteen inches wide. Plow out all runners that try to occupy the center and cut them off, leaving a path two feet wide free of vines.

Strawberries are one of my best profit crops. They sell best in local markets. I have sold them in our local market at Fairmont, West Virginia, at twelve and one half cents a quart when berries sent by express one hundred to one hundred and fifty miles went begging at ten cents. Strawberries also fit in well with the canning business.

It would be hard to recommend varieties for planting, as there are scores of varieties, each suited best to certain localities. The best way is to inquire of someone near you who grows them. JAS. D. BOWMAN.

## Fruit for the Small Home

NO HOME is too small for a few grape-vines. If you have no other spot, crowd a vine or two next to the cellar wall on the south or southeast side of the house and let the vines run up on the side of the house or over the veranda. A Worden or Concord thus placed and properly handled will give you a lot of good fruit.

When we have more room, even if only a common suburban lot, we can do better, and should set a row or two for a grape-arbor, or along one of the sides of the lot and train them up on a good trellis. If crowded for room, make the trellis high. A half dozen vines well taken care of will give a fair supply of grapes for any family. T. GR.

## Successful Rutabaga Culture

RUTABAGAS or Swede turnips are grown by only a few farmers; too few, in fact, for a crop which has such possibilities for the average farmer. The question will at once be asked by many, "What is the use of raising such a crop?" The uses of the rutabaga will answer this question. As a food for cattle or sheep they have no equal among root crops when their fattening possibilities are considered, and are far in advance of most of them.

We have found the Scotch method of feeding to be the best. After the crop is stored, ready for feeding, the cattle are tied up and fed on cut rutabagas and hay. Very little water is allowed them, some Scotchmen, in fact, allow no water. This produced solid, sweet meat, and in the quickest possible time, which means the saving of dollars.

Outside of being a valuable root for cattle and sheep, it is a great favorite, with many people, when boiled with corned beef. We use it both cooked as above and chopped up in soup, and can testify as to its good qualities.

Enough for the crop's praise, now for its culture. We have tried several different methods of cultivation and have settled upon the following as the most practical method. As with the cabbage, rutabagas demand rich soil; the richer the land, the greater the crop.

We will first look to the culture of the bed where we will start the plants, which are later to be transplanted. Select a moist, but well-drained, spot, and see that it is very rich. Plow and harrow and roll until you have a firm, finely pulverized seed-bed. After the first harrowing, cover the bed with ashes and hen-manure, and work this until it is well incorporated in the soil. We are now ready for the seed.

This can be sown in an ordinary hand seed-drill or, better, mixed with some sifted ashes and sown by the fertilizer part of your drill, letting every other tooth sow. After sowing, roll or firm seed-bed and leave until plants appear. Run a cultivator through the rows to keep out weeds, and plants will grow rapidly. In this section (western New York) we sow the seed from May 1st to 15th, and set plants about July 1st to 15th, and always have a bumper crop.

The plant-bed proper should be covered with manure early in the spring and plowed soon after. Whenever you have time during the early summer, harrow and roll same, always leaving it rolled to hold the moisture. About July 1st finish the preparation of the plant-bed and get ready to mark same into rows for the young plants.

We mark the rows twenty-eight inches apart, one way only, and set plants six inches apart in the row. A man goes ahead with a light iron bar and punches the holes. One man can make the holes as fast as three will transplant. Usually we have one man go ahead and drop the plants, one to each hole punched. The men setting have only to put the roots of plant in hole and firm the ground around it. In this way the planting is done rapidly and thoroughly.

A transplanter may also be used. One year, when behind with the work, we used a transplanter and were pleased with the results; but putting a plant every six inches makes the pace of the team very slow, and few horses are gentle enough to be driven this slow.

Some may ask, "Why go to the trouble of transplanting?" The answer is, "If you drill them in a permanent seed-bed, say in May, can it not be easily seen that the extra weeding and thinning more than balances the extra time employed in transplanting?" I am sure anyone who tries this method will be pleased with it. ORRIN SHEPARD.


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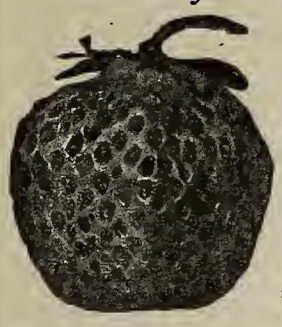
# GARDENING
By T. Greiner

## Refractory Strawberry-Bed



A Massachusetts reader has been unsuccessful in getting strawberry-plants to live on a plot on which he has been putting wood-ashes for a number of years in considerable quantity. Plants set in May and again in August withered and died when others were getting a stand in the same vicinity. This appears to be an overdose of alkali. Strawberries like a generous quantity of organic matter in the soil, and the potash furnished by the frequent applications of ashes has evidently burned out the humus. Better give the plot a few years of clover to dispose of the surplus potash. Use plenty of stable-manure and get the soil filled with vegetable matter before setting strawberries.

## Make the Most of Your Peas

Don't forget to make the land rich for garden peas, especially this year. Seed is expensive. We plant early and often to have them in succession. Plenty of time yet for planting the finer, wrinkled sorts, such as Telephone, Stratagem, Laxton and Champions. In the average good soil we can raise big crops by using mineral manures freely—superphosphate and muriate of potash, or wood-ashes, strewn along the rows at planting-time. We do not waste good and expensive seed on poor land—not by a long shot.

## Best Soil for Sweet Potatoes

Nothing is better for sweet potatoes than a warm, somewhat sandy soil. Any soil, especially if of a somewhat stronger type, can easily be made too rich. In that case there will be too much growth of the vine and not enough desirable root growth. If the soil is deep, besides, the tubers will be long and slim, rather than short and chunky, as we want them.

I cannot grow sweet potatoes here in western New York in this clay loam. I would grow some if I could plant them on a medium fertile sandy soil. I grew them in New Jersey, and found that I had better success when putting the manure or fertilizer in the hill rather than broadcast. A shovelful of old compost right under the plant in the hill is all right. This in reply to an inquiry from an Illinois reader.

## Manures for Early Plants

A reader suggests using poultry-manure in the hotbed for raising early plants. I would not object to its use in growing Spanish onion seedlings. The sooner we can get them to good size from seed sown under glass, the better. We can hardly ever get them too large, even if we sow the seed in January. It is different with cabbage and most other plants, possibly egg-plants excepted. For cabbage-plants, especially, I prefer a good strong garden loam without extra additions of highly stimulating manures, like hen-manure or nitrate of soda.

We want backbone in these plants, not a succulent, tall, spindling growth. Wood-ashes are good, giving the strong, stocky growth desired. A good fertilizer that contains mostly phosphoric acid and potash, with little nitrogen, will do no harm, no matter how freely applied. The hen-manure we would better save for our regular garden crops—onions, beets, lettuce, spinach or any other where bulk and succulency is desired. It is good for cabbages, cauliflowers, celery and running vines. For plants in the greenhouse or hotbed we seldom use it.

## Early Crops for Early Money

A reader desires to have a little piece of land ready to sow Portugal or other onion-seed about August 1st for green onions, and asks what early crops might be grown with profit that can be cleared off by the date mentioned. We can grow garden peas and have them all off by August. Whether they will be very profitable at present prices of the seed is another question.

Then there are cabbage and celery plants; spinach; early table beets; early lettuce grown from plants that were started under glass and set in open ground in early spring; Early Ohio potatoes and earliest cabbages, planted early; radishes, and possibly some others. We may also use an old strawberry-patch for this purpose. The land for all these crops can be heavily manured in the spring, preferably with old compost. Another application of the same, or of a good portion of commercial fertilizers, may be made just before the land is fitted for sowing the onion-seed. It is not necessary to rotate the onion crop every year, as is sometimes done. I sometimes keep the same piece of ground for the green-onion crop several years in succession. One crop comes off in June. Seed for the next crop is sown August 1st. In the time between, the only crop that might be grown is radishes of the quickest maturing kinds, such as Earliest Scarlet or Scarlet White-Tipped.

## Retail Versus Wholesale Selling

The question whether to sell at wholesale or at retail hinges on the opportunities we have. When we produce on a large scale, of course, selling at wholesale will be about the only way open to us. I grow a certain surplus of a large variety of different vegetables to dispose of, and living in a thickly populated neighborhood, I have consumers calling at the place for produce to such an extent that I seldom have anything left for a wholesale trade.

Thus I have the returns of the grower, and the profits of the retailer besides. There are a few lines in which I have to fall back on the middleman. I usually provide the stores with rhubarb, green onions, perhaps celery, sometimes early cabbages and cauliflower. My tomatoes are usually spoken for (ordered by telephone) by private consumers, often days in advance. Most vegetable crops, when sold directly to consumers, are quite profitable, and we cannot be blamed if we try to save the big percentage which the middleman usually demands for his services.

Sprinkle, sprinkle, little Jane,
That will do as well as rain.
Set your flowers in the light,
And they'll grow an inch by night.

## Profit in Cabbage-Plants

In most neighborhoods late-cabbage plants are in good demand every year. I find more money in raising plants for sale than the cabbages themselves. The money comes early, and it comes easy. No matter how small the garden, it is large enough for raising a few thousand, or ten or twenty, or even a hundred thousand cabbage-plants. The point is to make reasonably sure we have the sale for them. The demand by local growers extends all through June, and even July. I sell mine at twenty cents per hundred, in large quantities at one dollar and fifty cents per thousand.

In sowing, I make an ounce of seed reach over about two hundred and fifty feet of row, the rows being a foot apart. It is best to use a good garden drill, but hand sowing will do. The soil must be well prepared, fine and smooth on top, but need not be excessively rich. A good fertilizer (vegetable manure) comes handy, and may be better than too much stable manure. The one ounce of seed gives me no less than six thousand plants. These, cleaned up at twenty cents per hundred, give gross returns of twelve dollars. They are grown at a minimum of hand labor, as they require just a little cultivation with the wheel-hoe, but no hand weeding whatever.

Danish Ballhead is the variety most in demand for late cabbage. There is some call for Succession (or Henderson's Succession) for a mid-season cabbage, and occasionally for smaller numbers of Winningstadt, Surehead, Savoy, and possibly others. I grow a little of each of these, as also of cauliflower. Seed of the latter is very expensive, and the plants sell at no less than forty cents per hundred.

Trellised tomatoes, by standing up straight, admit ample sunlight to their roots, produce larger and better fruit, and prevent it from getting dirty or rotting by coming in contact with the damp earth and crawling insects.

## Plan Right in Planting Asparagus

Asparagus is a rugged plant. It will grow among stones. It will shoot up if planted a foot below the surface. Yet weeds will hurt it as they hurt any other crop. I had to plow up an old patch last fall simply because in planting the patch years ago we had not planned right, and I could not keep the weeds down. I find that a row with plants set quite deep and in such a way that we can get at it easily from either side with the plow, plowing to or away from the row, will give us more satisfaction and cause less trouble than a much bigger patch with rows too close or plants set shallow. Last year I made a new plantation and set the plants so that I can plow the whole patch with a one-horse plow without touching the crowns of the plants. Ground should be warm and rich. The plowing is done in early spring, and the rows hilled up by plowing a furrow against each row from each side when the shoots begin to start from the root crowns.

The cultivator is kept going between the rows. We cut but very few stalks the first year after setting the plants. A New Jersey reader asks about sowing cow-peas over the asparagus-bed after the cutting season. I have never tried it, but this would be better than letting weeds get possession of the patch. Cow-peas are never weedy. They gather nitrogen from the atmosphere, and die down with the first frost, leaving a mulch and humus.

## Potato Onions, Yellow and White

The potato onion is a multiplier. The yellow sort is much used in the South, but comparatively little here in New York or in the North. There is also a white sort which makes a smaller but longer-keeping bulb. In the Southern states, both sets and the larger onions are planted in fall, and will give early green onions, as also the earliest large bulbs that can be produced.

I am afraid that onion sets of any kind, except the Egyptian tree or winter onion, if planted in the fall in Northern states, would suffer very much from winter-killing. At least I have not had much success in that line. For spring onions I prefer to sow seed of Silverskin early in August, and for early fall bulbs seed of Prizetaker and Gibraltar (when I can get the latter) under glass in early winter.

The reader who inquired about potato onions can get a supply of them from any seedsman and give them a trial by planting sets or large onions, or both, in spring as well as in fall.

We wish to correct an error in the printing of Mr. Greiner's article, "Spray Materials Not Expensive," in our April 10th issue; also in the formula for home-made concentrated lime-sulphur given on Page 8, March 25th issue. The proportions of the materials for making concentrated lime-sulphur solution should have been as follows: Eighty pounds of sulphur; forty pounds of lime of ninety per cent. purity, or thirty-eight pounds of ninety-five per cent. purity; fifty gallons of water.

When looking through the pages of Farm and Fireside, don't forget to read the advertisements carefully, and write for the things which interest you. It is surprising how many new inventions and devices, which contribute to your comfort and happiness, are constantly being offered you at reasonable prices. You know there are no unreliable advertisements allowed in Farm and Fireside.

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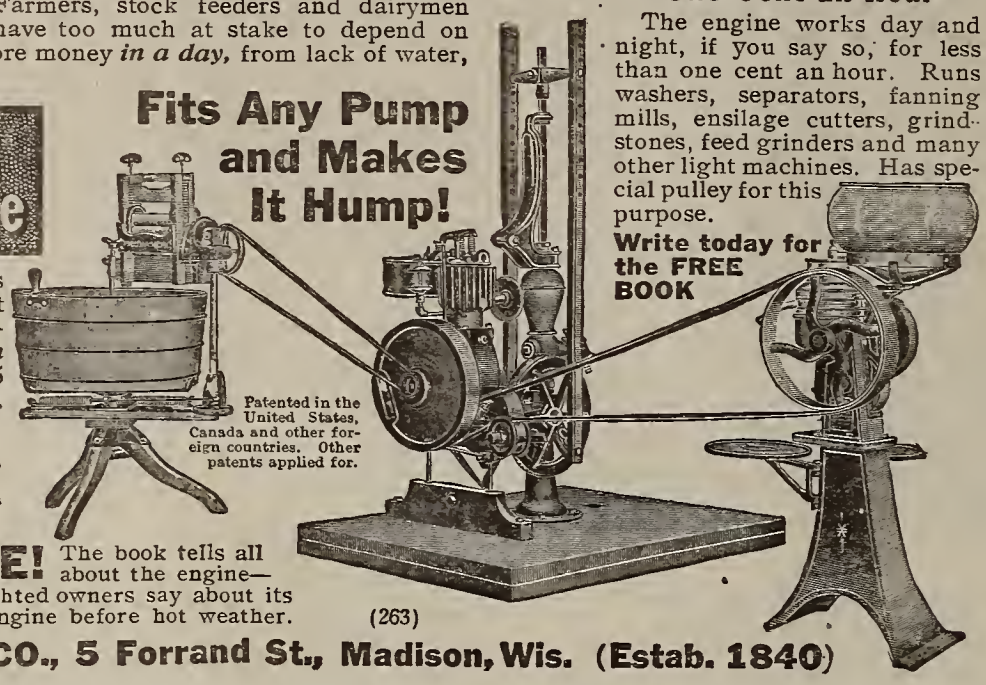

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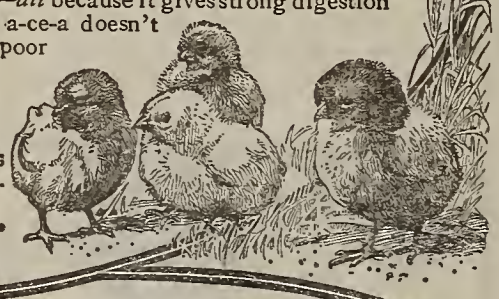

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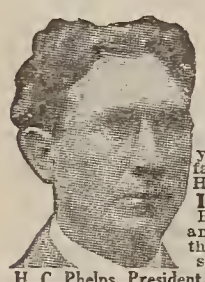

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# Poultry-Raising

## A True Story of Turkey Twins

EARLY last spring I took a notion to raise my own turkeys for Thanksgiving, so I ordered one half dozen eggs, paying one dollar for same. I was so disappointed when I saw the eggs, as one of them was a very large one, and I said, "That one will never hatch a healthy turkey." But as I would have had only five eggs left, I took the chance. Turkey-eggs require about twenty-eight days to hatch, so, after the six eggs had been set a week, I added six hen-eggs to the nest, making twelve, since the hen could cover twelve eggs as well as six. One of the hen-eggs got broken, and I was so sorry it was not the large turkey-egg instead, as it was only filling the nest for nothing. A week before time for them to hatch, one of the turkey-eggs was broken. Oh, how sorry I was that it was not the big egg instead, for I thought that four turkeys were the most I could get, even if all went well.

The day before they hatched I examined the eggs and found all of them pipped. I was so glad, as now I would have my five turkeys after all. Next morning I was very anxious to see if they came all right. To my great surprise and satisfaction, there were *six* of the finest little turkeys you ever saw, and I could not tell the twins from the others. They thrived and grew very fast, but during the first big rain I lost one, and later on we had a big storm and I lost two more. By that time they were quite large.

So I raised three out of six turkeys and six turkeys from five eggs. One of the turkeys that we had for Thanksgiving weighed thirteen pounds, and was pronounced by all who had the good luck to help eat it as being the best they ever tasted. Now, if any of you who may chance to read this turkey story have anything better, let us hear from you. MRS. HATTIE KENNEDY.

## How to Treat Sore Head

I HAVE had four years to inspect the ravages of the disease, sore head in poultry. I found it attacked old as well as young stock, and it is very contagious. I am sure that I carried the germs of it on my shoes to my flock, though I walked two miles from where I had been invited to see if I knew what was wrong. A sure preventive is Epsom salts and copperas. Give separately a large tablespoonful in a small dish of water early in morning, and keep all other water out of reach so that the fowls are forced to drink it. One dose a week will keep bowels in order and fowls healthy.

If you fear sore head, keep the yards spotless. I swept mine. Now to trap the mites. If you have movable slats or poles for roosts, take some paper or old rags and wind loosely on poles in such a manner that they will be full of crevices, but tie securely enough so that hens can roost all right. Then the next morning just examine a few crevices and you will be surprised at how many of the mites you have caught. Now take your poles out and set a match to the paper, and it will do your heart good to guess how many mites you are cremating. You need not burn up your poles, and this method has the advantage of being cheap enough for the slimmest purse and yet efficient. Repeat the process until you are satisfied that you have all the mites. If mites get in brooders, clean out thoroughly and crumple some old rags on the floor and walls, and in the morning dip them in boiling water. MRS. A. E. CRICK.

## Hurts Just the Vermin

A SUBSCRIBER asks whether it will not affect the hatching of the eggs to put moth-balls in the nest, as was recently recommended in FARM AND FIRESIDE by Mr. J. H. Haynes.

The latter answers: "We have used the plan for years without harm to the eggs. About the time chicks are expected, the balls are removed, however. It is not necessary to keep them continuously in the nests, unless vermin gets unusually numerous. Our success in keeping poultry free from lice and mites has been most satisfactory, considering the simplicity of the remedy."

There will be room at the top for the boy who fills the room he occupies at the bottom.

Don't think you can put a new breed of hens on the map until you have had more than one year's experience. Sometimes we think we know more about poultry the first few months than all the neighbors in seven counties. We get over that pretty soon, though. Costs a lot usually, but if we have the right stuff in us we will not be discouraged. The thing that counts for most with poultry is to keep cheery, study and stick to it. Success with poultry is generally proportionate to the enthusiasm and spirit with which one works as well as to experience.

# Poultry-Raising

## Recipe for Raising Chicks

Do you want to know how to raise little chicks? Well, here is my method. After the hatch is over, I sprinkle lice-powder over the hen and chicks, and then take them to their home, which is a good-sized box covered with roofing-paper. I do not feed the little fellows until they are nearly thirty-six hours old, simply letting them rest under their mother.

The first food consists of a little sand and bread-crumbs, dry bran and a little sweet milk or water. I feed this sparingly, but often for the first week. At the beginning of the second week I give them chick-food instead of the bread-crumbs, keeping the dry wheat-bran before them still, which furnishes bulk to the food. A little hard-boiled egg or a few mashed potatoes are relished.

After they are four weeks old, I only give the chick-food once a day, and give finely cracked corn and good sound wheat. The little fellows now are nearly feathered out. I put lice-powder on them once a week and keep the houses clean. About this time, too, gapes generally make their appearance. I have cured them by putting a few drops of camphor in the drinking-water, or by rubbing kerosene on the outside of their throats. However, gapes are difficult to cure, and preventive methods are much safer.

I spade up my yards to a depth of one foot and sprinkle slaked lime over the ground. Gapes have been rare since following this plan. After the chicks are six weeks old, they are pretty well out of danger. I continue the wheat and cracked corn, also a few oats soaked overnight, and a mash composed of bran, chopped oats and a few beef-scraps. I give them now all they will clean up in order to induce rapid maturity.

I always see that the youngsters have shade. They will not thrive under the hot sun. I provide not only fruit-trees, but sunflowers. I never hurry my pullets to laying by feeding them condition powder, because a forced pullet has never proved to be a good layer.

The secret of success in raising chicks is not in fancy buildings, yards or feed, but in careful attention and good sanitation.

Donald Boyce.

## Unto the Third and Fourth Egg

As a rule the writer has found that the influence of a mating will not extend beyond the third or fourth egg. That is to say, if the hens which have been selected to breed from have been with males of a different breed or class than those to which we intend to breed, the effects of this mating will disappear with the third or fourth egg laid. So the length of time we must wait before saving eggs for hatching depends on whether the hens are laying right along or not. If the hens are all in laying condition, it is probable that this will be at the end of the sixth or eighth day. But some of the hens may not have been laying at the time of this undesirable mating, and it may be two weeks, possibly longer, before this number of eggs will be laid. For this reason I would advise mating up the flocks three or four weeks before the eggs are to be reserved for hatching purposes.

The following experiment, which was made some time ago in relation to this question, may interest some. Forty-two White Leghorns were divided into three flocks with suitable pens and yards. Males of the same variety were placed with them on the first of March, these being the first roosters that had been on the place, so there could have been no previous fertilization.

The following table shows the total number of eggs laid each day by the forty-two hens, and the number that were fertile:

Day 1—22 eggs laid—0 were fertile.
Day 2—17 eggs laid—2 were fertile.
Day 3—25 eggs laid—14 were fertile.
Day 4—21 eggs laid—15 were fertile.
Day 5—20 eggs laid—17 were fertile.
Day 6—28 eggs laid—21 were fertile.
Day 7—17 eggs laid—12 were fertile.
Day 8—20 eggs laid—18 were fertile.
Day 9—24 eggs laid—21 were fertile.

This seemed to be about the largest number of fertile eggs that could be obtained, and the counting of them was discontinued.

The males were removed on the fifteenth of June and another record of the eggs kept as follows, the first day being the day the males were removed:

Day 1—18 eggs laid—12 were fertile.
Day 2—15 eggs laid—11 were fertile.
Day 3—11 eggs laid—6 were fertile.
Day 4—13 eggs laid—11 were fertile.
Day 5—16 eggs laid—6 were fertile.
Day 6—11 eggs laid—3 were fertile.
Day 7—10 eggs laid—6 were fertile.
Day 8—11 eggs laid—4 were fertile.
Day 9—14 eggs laid—7 were fertile.
Day 10—14 eggs laid—6 were fertile.
Day 11—18 eggs laid—8 were fertile.
Day 12—12 eggs laid—2 were fertile.

From that time on there were few fertile eggs. Which hens in this test laid the fertile eggs was not reported. In order to make an experiment of this kind thorough, the attendant should use trap-nests. But the results were interesting from the standpoint of showing roughly the rate of increase in fertility of the eggs of a flock, after mating, and the rate of decrease after separation.

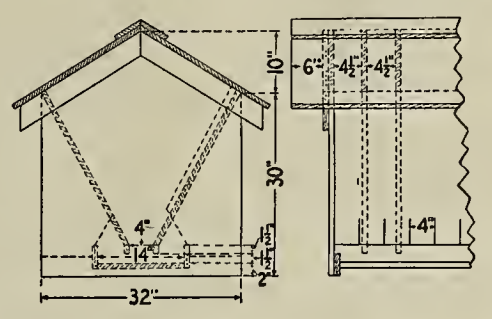
V. M. Couch.

## Cornell Feeding-Hopper

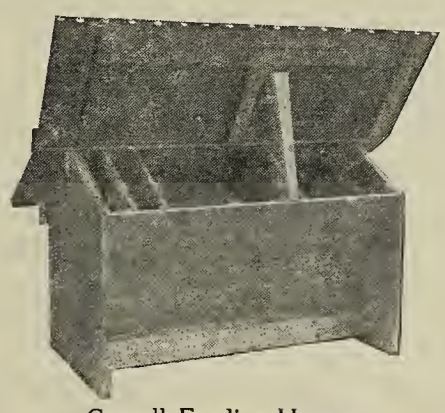
Here is a working plan for an outdoor double hopper designed for poultry-feeding by J. E. Rice and C. A. Rogers of the poultry department, Cornell University, Ithaca, New York. The end view is shown in the left-hand side of the diagram and one half of the front is represented by the part of sketch to the right.

This form of hopper is especially suitable for feeding grain, meat-scraps, shell and grit. The top is covered with prepared roofing or tar-paper to protect the contents from rain, and the overhanging eaves prevent any but a most driving rain from reaching the feed-trough. One side of the top is hinged so that the hopper can be easily filled.

As shown by the diagram the hopper is thirty-two inches wide and thirty inches




high. It may have any desirable length, but four feet nine inches is convenient. The feed-trough is fourteen inches wide. Every four inches along the trough six-inch lengths of wire are driven through holes in the side of the hopper and into the top edge of the



Cornell Feeding-Hopper

feed-trough. These, to a large degree, prevent the fowls from flirting the feed out and wasting it.

A hopper of this size will hold about three bushels of grain, about one hundred and thirty-five pounds of mixed ground feed, forty-five pounds of grit and thirty-five pounds of beef-scrap.

Even a pig knows the trough where it is fed, but many a farmer is unable to tell just what department of his farm feeds his bank account the best.

## Hatching and Rearing Ducks

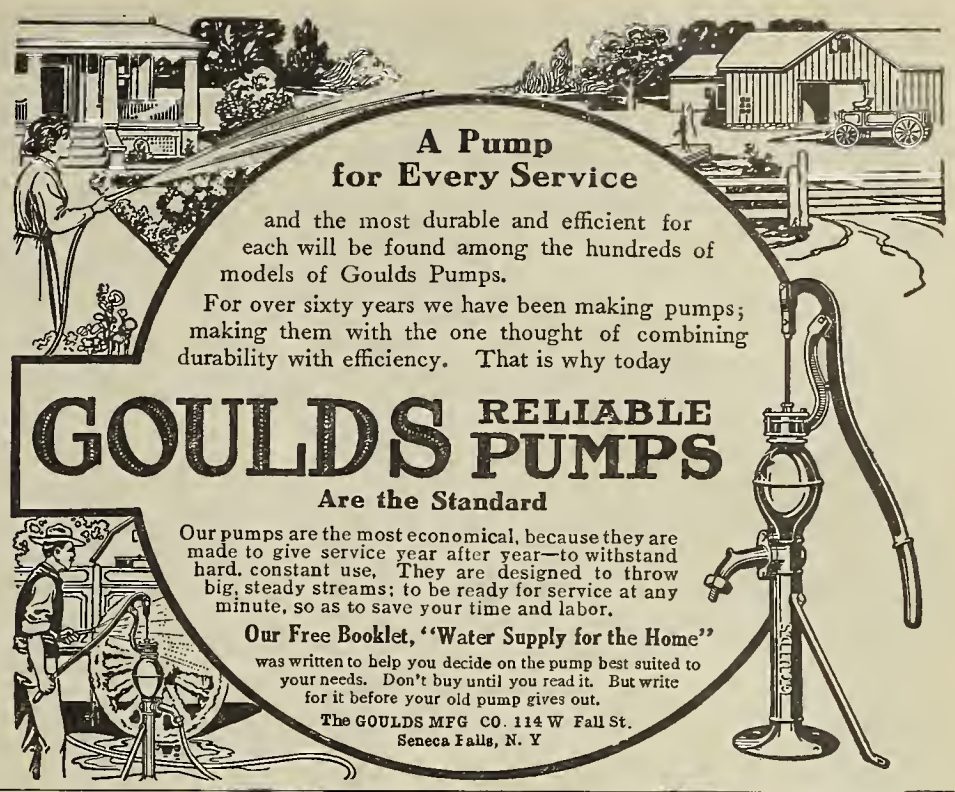
I always put my duck-eggs under hens for incubation. Hens make better mothers, and the ducks, if broodiness is discouraged or interfered with, will be laying again in a few days. I keep Indian Runners and find this method pays better, as the duck's services as a layer are worth more at any time than a hen's.

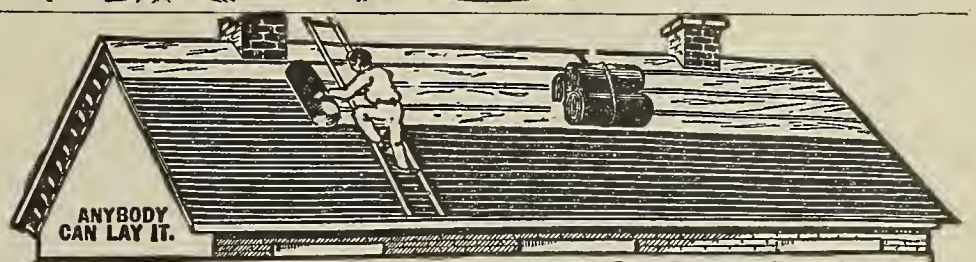
I usually sprinkle the eggs with warm water a half dozen times during the latter part of the incubation. My nests are always built on the floor or as low down as possible. The ducklings are so lively that often I find several out of the nest before the hatch is over, and unless the nest is built so they cannot possibly climb out of it, or else on the floor so they can return to it at will, they will get chilled and die. They should be hatched in a room away from other poultry, as hens will frequently peck them to death when first hatched.

I try to keep them from finding the little stream that runs near our buildings until they are a week or so old, as they want to stay in it so constantly that they may get chilled when so young. For several reasons I do not believe it pays to hatch young ducks much before June, here in New York, unless you are raising for the market. They are at their best for market purposes at about three months of age. Hatching in June brings them to condition in time for the Jewish holidays with a week or ten days for a special fattening diet.

For layers those hatched in early June are of sufficient age and maturity, if fed properly, to begin laying in November. I never confine my ducks after the first few days, as I think they grow much faster and develop much stronger constitutions if they can run at large. They do no harm to crops, gardens or flowers and do not bother about the house, as they prefer to spend their time near the water.

Mrs. E. G. Feint.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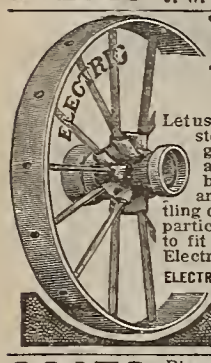

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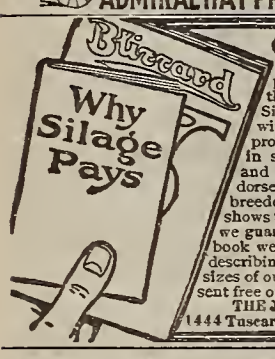

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## Live Stock and Dairy

### Discipline for Kickers

Several subscribers have asked for a detailed description of the methods to be used in curing horses of the vice of kicking on the road.

Different horses exhibit the same vice in such different ways and different degrees that the treatment often has to vary with individuals. The simplest causes are those in which an otherwise gentle horse gets the habit of kicking up his heels out of sheer high spirits. This very probably indicates that the horse is getting too much oats and too little work. Try using him rather more, or if this is impracticable, feed less oats, substituting corn or a mixture of corn-meal and bran.

If the fault is not in the feeding, direct correction ought to be applied, and applied early. Though the horse may kick playfully at first, and really seem to avoid hitting anything, once he strikes the dashboard or

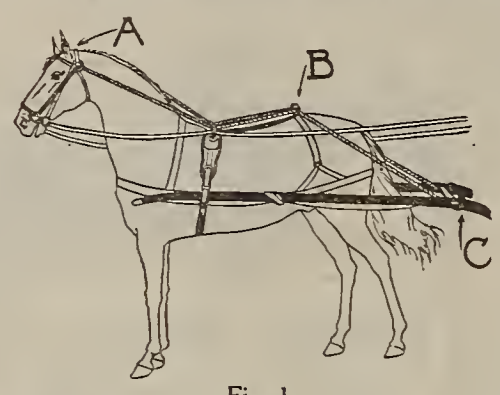


Fig. 1

gets his heels over the shafts, he is on the way to become a bad kicker. If the horse is really gentle, a little sharp reproof from the driver, at the time the vice is exhibited, may be all that is necessary. In my own practice this has often been quite sufficient.

The following method, illustrated by Fig. 1, is self-acting and, being also very efficient, may solve the kicking problem for a good many horsemen. Have a short strap (A), with rings sewed into each end, attached to the top of your bridle, so that the rings will hang just over the rosettes. Have an extra bit, a straight one. Have also an iron ring (B) tied strongly to your harness just where the strap that supports the breeching crosses the back-strap. Finally, have a long, strong cord about the size of a man's little finger.

Now tie one end of this cord to the off shaft, just back of the cross-bar, at C. (The single-tree and ends of traces are omitted from the diagram in order to simplify it.) Pass the other end of the cord under the cross-bar, up through the iron ring (B), forward through the off terret, up through the off ring at top of bridle, down through the ring of extra bit, over horse's nose and through near ring in extra bit. Then pass it up through near ring at top of bridle, back through near terret, back through iron ring, and tie to cross-bar on near side in the same way as on the off side. Tie it short enough to have the device form a check-rein that will keep the horse's head at the proper height, or just a trifle higher. Tie a string to top of bridle and to the cord where it passes over the horse's nose, so that it will not slip down.

You have now a device that, as long as your horse goes quietly along, simply acts as a check-rein and will not injure or irritate him. But the moment he tries to kick, it will reprove him automatically in a most effective manner by jerking up his head. In fact, no horse can kick with this rigging on, and he will soon give up the attempt.

I have used this device effectively on very bad kickers. It completely cures in a short time. When the horse has dropped the habit, a check-rein formed on the same principle can be kept on for a while.

With some horses the kicking vice is complicated by a tendency to run away. Perhaps the best treatment for such cases can be administered by means of the "controller" shown in Fig. 2. This device—it has been described before in Farm and Fireside—is made much like the rigging of Fig. 1, but has a wider usefulness. The short strap (A) with rings on the end is attached to the top of the bridle and a straight bit used, as above described. But the cord is put on as follows: One end is retained in the breaking cart. The other end is carried forward through the off terret, then up through the off ring on the short strap (A) down through the off ring of the extra bit, over the horse's nose, through ring of extra bit, up through near ring on short strap and back through near terret, just back of which (at X) it is tied to the long end, so as to form a check-rein. Adjust this so that it will keep the horse's head at the proper elevation, rather

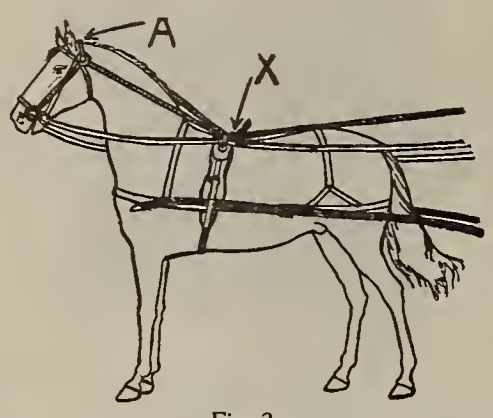


Fig. 2

low than high, but not too low, when there is no pull on the long end of cord. Tie a string from top of bridle to cord over horse's nose to keep cord from slipping down.

When the horse attempts to kick, pull sharply on the line, and his nose will be twitched up into the air. He will be able to neither kick nor run. The controller can be kept on until the horse seems to have entirely forgotten his vice. The cord is not in the driver's way and it does not hamper the horse until tension is put on it. When the controller is finally left off, I would recommend that a four-ring bit and over-draw check-rein, made on the same principle as the controller, be kept on, for it is bad policy to take chances with an ex-runaway.

David Buffum.

### A Rubbing-Post

Keeping the vermin off hogs is an important matter. A hog cannot make the maximum amount of gain when covered with vermin of any sort. Lice on hogs is a very common trouble. Putting the whole herd in a close shed and spraying them at stated intervals with some insecticide and keeping them together for a few hours after the treatment is a practice that is advocated by many.

Another and more simple method that lately came to my attention is the following: Simply set some posts in the hog-yard, or nail a board between two posts, placing the board at about the same height as the back of the hog. Keep this post covered with crude oil, which, by the way, is rather cheap. The hogs in coming and going will rub against the post and keep their skin covered with the oil, which is a vermin preventive.

C. A. Waugh.

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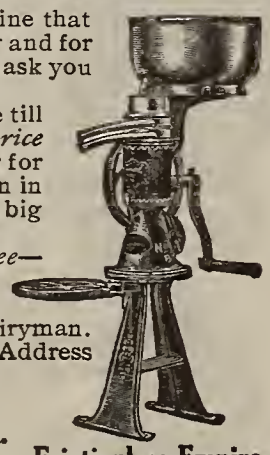

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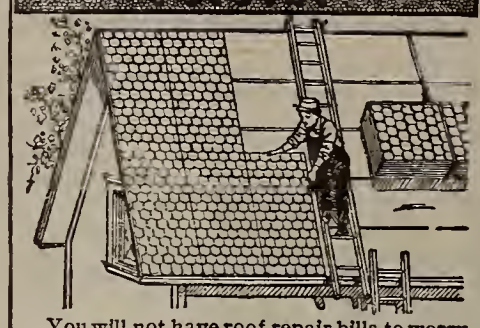

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$10,000 Lightning Bond. We guarantee every Edwards roof against lightning with a $10,000 bond. Our patent interlocking device protects the nails and prevents rusting and leaking at the joints.

Edwards "REO" Steel Shingles

FACTORY PRICES—WE PAY THE FREIGHT. As we are the largest makers of iron and steel roofing material, we are in a position to give you the very lowest prices with freight prepaid.

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which is full of valuable roofing information. Send us the dimensions of your roofs and we will quote you the low cost of a Reo Steel Shingle Roof delivered to your railroad station. Ask for our Special introductory offer to represent us in your community.

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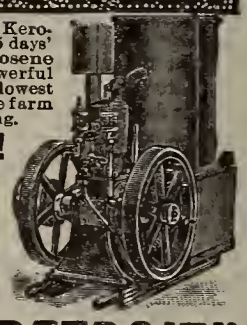

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Automobile owners are burning up so much gasoline that the world's supply is running short. Gasoline is 9c to 15c higher than coal oil. Still going up. Two pints of coal oil do work of three pints gasoline. No waste, no evaporation, no explosion from coal oil.

Amazing "DETROIT"

The "DETROIT" is the only engine that handles coal oil successfully; uses alcohol, gasoline and benzine, too. Starts without cranking. Basic patent—only three moving parts—no cams—no sprockets—no gears—no valves—the utmost in simplicity, power and strength. Mounted on skids. All sizes, 2 to 20 h.p., in stock ready to ship. Complete engine tested just before crating. Comes all ready to run. Pumps, saws, threshes, churns, separates milk, grinds feed, shells corn, runs home electric-lighting plant. Prices (stripped), $29.50 up.

Sent any place on 15 days' Free Trial. Don't buy an engine till you investigate amazing, money-saving, power-saving "DETROIT." Thousands in use. Costs only postal to find out. If you are first in your neighborhood to write, we will allow you Special Extra-Low Introductory price. Write!

Detroit Engine Works, 133 Bellevue Ave., Detroit, Mich.

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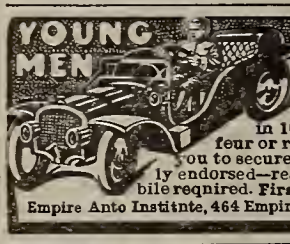

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From Factory To Horse

# Live Stock and Dairy

## Kicking in Stall

How to cure a horse of the habit of kicking in the stall—that is the problem sent in by an Ohio reader. The horse in question is gentle otherwise and kicks only at night, probably from nervousness.

Advisers of the kind that tell you "a good thrashing will cure him" are always plenty. Don't do it. Whipping will not cure such cases.

The best cure is to fix a wide and thick plank thoroughly across the stall just over the animal's hips, about an inch above them. This will make it impossible for him to kick by preventing him from throwing up his hind parts, and it ought to cure the kicking vice. The plank does not interfere with the horse's comfort in any way, and it may be allowed to remain in position a long time if necessary. DAVID BUFFUM.

## Our Rural Solomon

He that abuseth his colts may expect to be kicked by his horses.

A clean stable is a source of pride; but a filthy one bringeth the condemnation of one's neighbor.

He becometh poor who cultivateth with a slack hand, but the hand of the diligent maketh rich.

Sleek cattle are good to look upon; but he that stinteth their feed endangereth his own eyesight.

Much food is in the tillage of the poor; but there is that which is destroyed for want of judgment.

Knowledge aideth an increase in harvest; but wisdom without labor availeth little.

As the churning of milk bringeth forth butter; so the forcing of wrath bringeth forth strife.

Long hours of labor bring their own reward; but laziness wins a scant harvest.

He that tilleth his land shall be satisfied with its increase; but he that renteth it to another shall lose even its bounty.
ORIN EDSON CROOKER.

## Pure-Breds for Everybody

PURE-BRED stock is admired by most farmers, and with few exceptions they think it would be an excellent thing to own a pure-bred flock or herd. Yet a goodly number of these same farmers have gotten into their heads the idea that they could not possibly afford to pay the price asked for pure-bred stock, of any kind, with which to start a pure-bred flock or herd.

Plainly speaking, they do not seem to appreciate the fact that good stock is more often the cause than simply the evidence of prosperity. They seem to think that this class of stock is an expensive luxury which can be afforded only by the most prosperous farmers, rather than an investment which would add greatly to their income, and which as a matter of good business they should make.

Not long ago, one of this class of farmers and myself were in conversation as regards the raising of pure-bred stock. After I had mentioned some of the advantages to be derived from the raising of this class of stock, he replied: "Pure-bred stock is all right and would likely pay if one could sell them at high prices for breeding purposes, but I'm confident I couldn't do that here in Illinois; I'm obliged to sell my stock on the open market and cannot afford to pay high prices for stock to breed from." This is the opinion of a great many other farmers, and so they go on breeding in a haphazard way, or in the way which is the most convenient or cheapest for them, and consequently our markets are flooded with live stock of an inferior quality which in many cases sells for prices which involve an actual loss to the grower, instead of returinng him a legitimate profit for his investment of feed and labor in their production.

But let us look at the matter from another standpoint and see if the farmer, who thinks that he cannot raise pure-bred stock, could not build up a pure-bred herd; or rather, more correctly speaking, if he can well afford to keep any other kind.

First, let us see if it is such an expensive matter to get the foundation stock. Suppose he keeps cattle, and suppose, as a starter, he goes to some reliable breeder and buys just one young cow, already in calf and ready to become a producer. A short time after he gets her home she drops a heifer-calf, and suppose that she drops heifer-calves half the time and that her female progeny do the same after two years of age for a period of ten years, how much of a herd would that farmer have? When you figure it up, it will be found that, if there are no losses, he would have a herd of thirty-two females, all old enough to become producers at once, and in the meantime would have had thirty-one males to dispose of in the manner which proved most profitable, either as breeders, if the market for such would take them at a good price, or "in the open market," where they would certainly command a better price than the scrubs or animals of indifferent breeding which he had formerly been producing.

This rate of production, of course, would be extreme, and in most cases would probably not be attained, but it is within the bounds of possibility with proper attention to details and good management on the part of the breeder. However, it would not be necessary that this rate of increase be maintained to give the average farmer a good herd of pure-bred cattle within a single decade from his original investment in one good cow, for most farmers do not keep as large a herd as thirty-two head of producing females.

Suppose the start were made with sheep instead of cattle. The figures given would be easily attained with ordinary care; or, if hog-raising were made the specialty, a sufficient number of good ones could be produced from a single female within a period of ten years to supply an entire community of farmers with foundation stock for pure-bred herds; while with horses the results would be about parallel to those with cattle.

Now, then, when viewed in the light of the possibilities in production as I have above set forth, what farmer will say that he cannot afford to buy one pure-bred animal to get started in the pure-bred business?
R. B. RUSHING.

## Sitfasts Mean Sore Shoulders

AN INDIANA subscriber was buying a mare lately when he noticed some small lumps or thick scars on her shoulders. The lumps were about the size of small shucked hickory-nuts, so small, in fact, that the hair around them covered them, though no hair grew directly over the lumps. They did not adhere to the flesh under the skin. Our subscriber wanted to know whether these lumps were merely blemishes or whether they would cause sore shoulders when the mare was worked.

Dr. C. D. Smead thus answered the inquiry: "Such lumps are of a fibrous nature and are called 'sitfasts' by veterinarians. They are quite likely to make the shoulders sore in case the collar presses on them in working. If there is a competent veterinarian near, have him dissect out the lumps—it is best to do this, of course, at a season when the animal is not needed, so the wounds will have time to heal well before the animal is used. If this operation is not possible, it may help to use a 'humane collar,' made by Humane Collar Company, Chicago Heights, Illinois."

**You Can Cure That Lame Horse Under A Bond Guarantee**

A LAME horse means money lost. You can neither work him or sell him to advantage. There is no excuse for your having a lame horse about the place for we absolutely guarantee Mack's $1,000 Spavin Remedy to cure spavin and send you a bond to back up the guarantee.

He Asks You To Please Send This

This is a straight-forward business proposition that yon cannot overlook if you have a lame horse. Not only for the sake of the horse—but for your pocket-book as well, you should read every word of this advertisement and then send the coupon without the loss of an hour.

Don't let your horse suffer—don't sell him for a few dollars—ask us to tell you how to remove the lameness safely, surely and quickly.

**Under $1000 Bond We Guarantee Mack's Remedy to** quickly and permanently relieve the worst case of Bone or Bog Spavin, Ringbone, Thoroughpin, Curb, Capped Hock, Shoe Boil, Sprung Knee, Lacerated and Ruptured Tendons, Sweeny and all other forms of lameness affecting a horse. Contains nothing that can injure the horse and heals without leaving scar, blemish or loss of hair. We positively guarantee every bottle of Mack's $1,000 Spavin Remedy; if it fails, you get back every cent you paid for it as stated in our $1,000 Warranty Bond.

***Relieves Cases Formerly Considered Incurable***

No matter how long your horse has been lame, or what the nature of his lameness, you can absolutely rely upon **Mack's $1,000 Spavin Remedy.** We know of many cases where owners have paid out big fees and had valuable animals tortured with "firing," "blistering" and other good-for-nothing methods and as a last resort tried **Mack's $1,000 Spavin Remedy,** and were amazed at the painless, positive, quick and permanent cure.

***Nearly Every Mail Brings Us Letters Like the Following:***

"The remedy you sent me cured the two horses that the hoof was coming off. The mule's foot was nearly off when I got the medicine, but in five days the mule was able to walk on it. The horses are working every day, and have been since using your remedy the third day. It is the best medicine I ever saw for the foot. Our Vet. said those horses would not be able to work in 12 months, but he sees his mistake now. I recommend your medicine to every one as I know it is all O. K." Yours truly,
Ludowici, Ga., Dec. 7, 1910. J. T. COLLINS.

"I am pleased to tell you that MACK'S THOUSAND DOLLAR SPAVIN REMEDY has proved far beyond my expectations. My horse had been lame with side bones on each side of foot for about eighteen months, and I had thought of shooting him at different times. I tried to work him but he would go so bad he would hop along on three legs. My neighbor told me he would never be of any use as they had had horses with the same trouble. I tried other remedies without success, but am working him now and he is sound, and have tested him well. I recommend your 'Mack's $1,000 Spavin Remedy' to all." Yours truly,
Summerland, B. C., Dec. 4, 1910. R. H. STEWART.

***Your Druggist Will Obtain Mack's $1,000 Spavin Remedy For You***

if you ask him. Price $5.00 per bottle. If he refuses, remit $5 to us and we will see that your order is filled without delay.

No matter where, when or from whom you buy **Mack's $1,000 Spavin Remedy** the price is the same. Every bottle is absolutely guaranteed, and is accompanied by our $1000 Warranty Bond, which insures you that your money will be refunded if the remedy fails to do all we claim for it, as stated in our guaranty.

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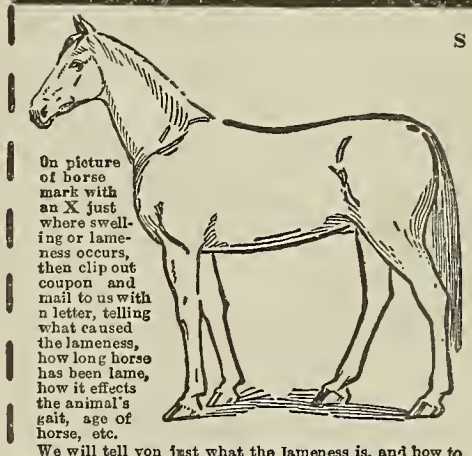

On picture of horse mark with an X just where swelling or lameness occurs, then clip out coupon and mail to us with a letter, telling what caused the lameness, how long horse has been lame, how it effects the animal's gait, age of horse, etc.

We will tell yon just what the lameness is, and how to relieve it quickly. Absolutely no charge. Write today.

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# Why DE LAVAL Cream Separators Are Best

### De Laval the Logical Leader

It is not due to any mere stroke of luck or freak of circumstances that the De Laval Cream Separator has maintained first place in the esteem of cream producers ever since its invention in 1878. There is a reason for everything if we but know it and there are many reasons why the De Laval is now and always has been the best cream separator.

### De Laval the First Practical Separator

Dr. De Laval invented the first successful continuous cream separator because he had worked harder, was better informed, and knew more about the centrifugal separation of cream from milk than any other man who had attempted it.

Starting with this advantage the De Laval Company has maintained its lead in the improvement and development of the separator, step by step from year to year, because it has always had an organization better equipped in every way to build the best separator than any one or all of its would-be competitors combined.

### World-wide De Laval Organization

The De Laval organization extends the world over, with a number of the finest and largest shops in the world in America, Sweden, Germany, France, Austria, Russia and other countries. Every one of these shops is devoted solely to the building of separators. Their manufacture is not simply incidental to that of something else, as is the case on the part of every would-be competitor. No other separator shops compare with them in size, equipment or volume of production. They produce more separators in a day than any competitor in a week or most of them in a month.

### De Laval Designers Most Experienced

The De Laval organization of separator scientists, experts, engineers, designers, practical manufacturers and skilled workmen of all classes, not only in one country but a half dozen, is unapproached by all would-be competitors combined. The De Laval Cream Separator as we know it today is the composite production of these men of many shops and many countries, the amalgamation of the longest and best separator experience in the world.

### All Important Cream Separator Patents Controlled by De Laval Company

Moreover, the principal features devised in the construction and development of the De Laval machines have naturally been covered by patents, numbering several hundred in all, so that, however great their knowledge of De Laval machines, would-be competitors have been compelled to utilize means of construction which would avoid infringement of these patents, and thus forced to adopt less efficient and less desirable methods until certain De Laval patents had expired, by which time the construction covered by such patents had been discarded and abandoned or further improved in the course of De Laval progress.

### De Laval Used Almost Exclusively by Creameries and Butter Factories

That, briefly, is why De Laval Cream Separators have maintained their supremacy, regardless of one competitor or another, increasing their sale year by year until their already nearly universal use in larger sizes by creameries, butter factories and milk stations is rapidly becoming as general in the farm and dairy likewise, and for the self-same reasons.

***A De Laval catalog or any desired separator information will gladly be sent for the asking.***

**THE DE LAVAL SEPARATOR COMPANY**

166-167 BROADWAY **NEW YORK** — 29 E. MADISON STREET **CHICAGO** — DRUMM & SACRAMENTO STS. **SAN FRANCISCO**

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Busy asphalt-diggers in Trinidad Lake

Natural asphalt is the life of

# Genasco

**the Trinidad-Lake-Asphalt Roofing**

And natural oils are the life of Trinidad Lake asphalt. They do not evaporate when exposed to sun and air like the oils of coal-tar and other residual pitch roofings. This is why Genasco does not crack and leak and go to pieces. It stays *lastingly* waterproof.

Mineral or smooth surface. Fully guaranteed.

The **Kant-leak Kleet** waterproofs the seams of roofing without dauby cement, and prevents nail-leaks.

Ask your dealer for Genasco with Kant-leak Kleets packed in the roll.

**The Barber Asphalt Paving Company**

Largest producers of asphalt, and largest manufacturers of ready roofing in the world.

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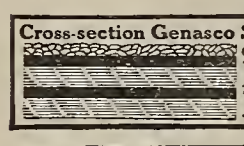


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Soon save their cost. Make every wagon a spring wagon, therefore fruit, vegetables, eggs, etc., bring more money. Ask for special proposition. Harvey Spring Co., 729-17th St., Racine, Wis.

## Live Stock and Dairy

### Enforced Hog Table Manners

Several correspondents have suggested that we publish a description of the swinging door that is so handy over hog-troughs. The plan is an old one and many of our readers no doubt use it, but it is worth re-publication for the benefit of those unfamiliar with it.

The accompanying picture shows these swinging doors in use in a large Minnesota hog-barn, the pens are on both sides of a central alleyway, from which the feeding-troughs are filled.

The purpose of the swinging doors is, of course, to keep the eager porkers out of the trough while it is being filled. When the slop is poured into the trough from above, or down a chute, the hogs pile into the trough and receive the slop on their heads more as a bath than as a meal. A door is therefore hung directly over the middle of the trough by hinges attached to its top edge. It is pushed inward to exclude the hogs and may be held there by a sliding or turning catch until the trough is filled. A lever can be attached to help in pressing back heavy hogs.

The hog-barn shown is, by the way, built on a plan that is very convenient, especially when it is desirable to have many pens to separate pigs of different litters, sizes or breeds. A number of pens, with partitions between, are arranged on both sides of the central alleyway, and there are outdoor yards on both sides of the barn, each pen opening into its separate yard. G. H. B.

"A door . . . is pushed inward to exclude the hogs"

### Dog-Raising on the Farm

There is a farmer living in Delaware County, New York, who educated his daughters by the proceeds from his dogs. He raises the cocker spaniel only.

His start in the dog business was made by a friend giving him a female cocker spaniel.

One morning he was surprised at finding three wee puppies in the kennel. As the puppies grew older, he trained them as hunting and house dogs. A cousin of the family, who was a sportsman, advised him to advertise their sale in a number of magazines dealing with outdoor life. He did so and in due time received replies to his advertisements. In answering these he gave a full description of the dogs and inclosed a photograph.

Pure-Bred Cocker Spaniel

The first two dogs were sold for ten dollars each, the last brought twenty-five dollars, as the crest on the note-paper seemed to demand it. Then a dog-raiser in that section moved away and this farmer was able to take over his kennels at a very low figure. He continued advertising yearly in the sporting papers and also had circulars printed.

His best season is at the holidays. He often tells how at this time of the year he sold a dog that he never owned for seventy-five dollars. He corresponded with the party, and after making the sale, sent the order to a friend of his, who had a dog answering the description. He made fifty dollars in this transaction.

The dogs have a large inclosed yard, built around a one-story house, containing two rooms and heated in winter by a stove separated from the dogs by wire screening.

One should try to breed the best dogs. Get one or more animals with a pedigree, as soon as possible. This is necessary, in advertising, to obtain a fancy price. He feeds his dogs plenty of skim-milk, corn-meal mush and johnny-cake, but he feeds them meat sparingly.

The cost of keeping a dog is about fifty cents per week. He raises his own corn for corn-meal and takes home the skim-milk after his milk is separated at the creamery. His dogs net him two thousand dollars per year. Lou M. Cudney.

### Sheep on Rape

"How many sheep can be run to the acre of rape?" asks a subscriber in Minnesota. An average good crop of rape will carry from thirty to fifty sheep for a month. Of course, old ewes and wethers clean up an acre much more quickly than the same number of lambs. Do not discontinue a small grain allowance—say one pound of oats per day to each ten lambs—when the sheep are on the rape. This helps to prevent bloating if given early in the morning before turning them into the rape. One hour is all they should be, at first, allowed in the rape, gradually increasing the time. The safest plan is, if possible, to give them access to pasture so that they can run in and out of the rape as they please. This insures against bloat.

"Will rape do well on sandy soil?" is another question asked. Rape will grow on almost any soil; but where sand is in excess, a good dressing of fairly well-rotted yard manure is almost a necessity.

About sixty days after sowing, the rape should be ready for the lambs.

Jno. Pickering Ross.


# A Good Judge of Cows

is likely to be a good judge of a cream separator. The same quality of brains that enables a man to breed high-class dairy cattle leads him to buy the best cream separator.

It is worth noting that the man who produced the World s Record Holstein cow,

**COLANTHA 4TH'S JOHANNA,**

has a United States Cream Separator. This man is W. J. Gillette, of Rosendale, Wis.

And do you know that the owner of

**JACOBA IRENE,**

the great record-breaking Jersey cow, A. O. Auten, of Jerseyville, Ill., uses the United States Separator on his farm.

Also the owners of the wonderful, $10,000 Guernsey cow,

**YEKSA SUNBEAM,**

the Riebrock estate, of Helendale Farms at Athens, Wis., use **four** United States Separators on their farms.

**TWILIGHT LONAN**

Chas L Hill. of Rosendale, Wis., owner of the celebrated Guernsey cow, Twilight Lonan, uses a United States Cream Separator on his farm.

**LORETTA D.**

F. H. Scribner, of Rosendale, Wis., who developed the celebrated Jersey cow, Loretta D., and who is one of the great Jersey breeders of the country, uses a United States Cream Separator.

If the **United States Separator** is the separator for these business men and thousands of others, leaders of the dairy world, **why not for you?** These experts—men who know, and do—require the use of a separator which **skims closest, washes easiest, runs easiest,** and **wears longest.**

This is the reason they all choose the United States Separator. Send for Catalog No. 69 today.

The United States Separator holds World's Record, therefore is the **World's Standard** Separator.

**Vermont Farm Machine Co., Bellows Falls, Vermont.**

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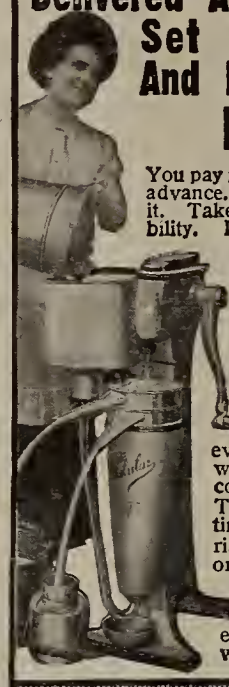
**Have the SHARPLES Tubular Cream Separator Delivered At Your Home, Set Up, Started, And Left With You FREE**



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No disks or other contraptions. Twice the skimming force of others. Skims faster and twice as clean. Wears a lifetime. Guaranteed forever by America's oldest and world's biggest separator concern. You can afford a Tubular—for it lasts a lifetime. You cannot afford to risk money on any "mail order" or other (so called) cheap machine that lasts one year on the average. Your present separator, no matter what make, taken in part payment for a Tubular.

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SEE THAT REEL THIS AWL SEWS

a Lock Stitch like a machine. Just the thing for repairing Shoes, Harness, Buggy-tops, etc. Sews up Grain Bags, Tents, Awnings, and Wire Cuts on horses and cattle. Makes a neat, durable repair and quickly, too. Has a diamond point, grooved needles, a hollow handle, plated metal parts, and a reel holding 24 yards of waxed linen thread. No extra tools needed. Can be carried in any tool case or the pocket. Special discount to agents. One man sold $200.00 worth in four days. M. Neal sold 20 in five hours, cleared $12.50. Had no experience. Regular price $1.00. Complete sample with one large, one small, one curved needle and reel of thread, sent postpaid for 60c, 2 for $1.00. Get one, keep it a week or two, use up all the thread, mend all your old harness, etc., and then if you are not satisfied return the Awl and we will refund your money without a word. Send quick for sample and complete instructions.

**ANCHOR MFG CO. Dept. 652 DAYTON, O.**



**People do not wrap the reins around the whip any more**

And they don't find them under the horse's feet. They just slip a

**Fernald Dash Rein Holder**

over the dash and slide the reins under the tongue. The holder grips the dash; no screws or bolts. The reins slip in easily, but are held securely. Small, attractive in looks and always on the job. 15c. at hardware, carriage and harness dealers. If your dealer cannot supply you, send 20c. to us.

**Fernald Manufacturing Co., Inc., North East, Pa.**
Makers of Fernald Quick-Shifts, Fernald Double Trace Holders and Spitzli Couplers.



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Our Democratic friends on Capitol Hill are in a frightful stew. They are going to make a record for economy if they have to bust a trace; but they would prefer not to bust it. They want to show that they can run the government cheaper than the Republicans have been doing it, but, on the other hand, they want to do it better. Now, government is an article that comes high. It is one commodity which seems to cost more about in proportion as you get a poorer article.

In a large sense, however, you can't give the people more of the benefits of government without spending more money for it. The Republican party has always been right generous about passing out benefits of government; but its disposition has been to provide these benefits indirectly, by such processes as the protection of home industries. The Democratic tendency is to make both taxation and benefits more direct and palpable.

### The Relation of Age to Efficiency

Take, for instance, the improvement of rural schools and the development of industrial education. The Republican North is composed of rich and prosperous states that have traditionally felt able to provide their own educational facilities. The South has not been able to serve itself so well in this line, and for that reason Southern congressmen and senators have looked with more favor, as a rule, upon proposals for federal education. The South has manifested a great deal more appreciation of the educational work of the Department of Agriculture than has the North. The great work conducted by the late Dr. S. A. Knapp was done mainly in the South. The death of Doctor Knapp within the past month, at the age of seventy-seven, will be mourned by tens of thousands of Southern farmers who knew, and had benefited by, his methods. The work will go on, Doctor Knapp's son, Mr. Bradford Knapp, having been placed in charge of it by Secretary Wilson. And we may be sure that whatever a Democratic Congress may undertake by way of economies it will not interfere with such activities as these. The Democratic South understands too well their practical benefits.

To digress for a moment, Secretary Wilson gave me a highly interesting lecture on the Osler theory of age and efficiency while talking about Doctor Knapp the other day. The Secretary is in no position to indorse the notion that a man is useless after he passes forty, because he is himself seventy-six. Several ambitious publicists have been waiting for a dozen years or so for the shoes of the sturdy old Secretary, and waiting in vain. I asked him if he had any notion of vacating said shoes. He replied amiably that he was feeling extremely well and didn't feel able to name a moving-day. "An aunt of mine in Scotland," he said, "died recently at the age of ninety-six. She had never been very well."

Secretary Wilson declares that, for real usefulness, a man needs to be pretty well seasoned before he is of much account. "Doctor Knapp," he elucidated, "spent seventy years getting together with information and experience which made him exactly the man we needed in the position he held for the last seven years of his life. Nobody else could have got the equipment which he brought to this department in any shorter time."

### Congress Will Be Ready

But I was not intending to discuss Oslerism. The troubles of the Democratic leaders with the problem of governmental economy and governmental efficiency, and the relation between their difficulties and the probable course of legislation in which farmers are interested, constitute at least a more immediately interesting theme. In the last Congress, Speaker Cannon and most of his chief lieutenants were thoroughly opposed to the various measures looking to federal aid for industrial and agricultural education. Chief of these was the Dolliver-Davis bill, which proposed to give substantial financial help in carrying practical agricultural instruction down into the public schools. The South feels the need of this sort of thing much more keenly than does the North, and indications now are that this particular legislation will have a better chance of passage under the incoming régime than it had under the outgoing. Congress is going to be ready to give an adequate national contribution to the cause of better rural education, just as soon as the rural population gets ready to avail itself

## Federal Aid to Rural Schools

### By Judson C. Welliver

of that benefit. Indeed, it is my opinion that Congress will be ready to provide the money long before the rural community is prepared to make effective use of it.

Assistant Secretary Willet M. Hays, of the Agricultural Department, has been devoting much of his energy in recent years to the effort for systematic reorganization and betterment of country schools. He declares that the first long step must be taken in the extinction of the old-fashioned sub-district school of one room, one teacher and the three R's. For it, must be substituted the consolidated rural and village school.

Mr. Hays has seen a splendid vision of the future which he firmly believes will be realized when our rural school system shall have been perfected on this basis. In a recent conversation on the subject, he said to the writer:

"We have about 300,000 little country schools in this country, two thirds of them in well-settled and developed neighborhoods. These favorably situated schools could be and should be consolidated into 30,000 larger schools. This consolidation depends in some wise on the provision of better roads; but, conversely, the better roads will come very rapidly after the people decide to have consolidated country schools. Consolidated schools will mean that farm children will have the same advantages of segregation into grades, of better-equipped teachers, of more specialization and of pursuing their studies into higher branches that are now provided to pupils in town and city schools. Pupils living at a distance must be systematically transported to and from the schools. I have observed the optimistic forecasts of some enthusiasts who believe schools of this kind can be conducted just as cheaply as the little single-room sub-district establishments. I am not holding out any such promise. I believe the consolidated schools will cost somewhat more; but they will be immeasurably better."

### The Local Advantages Are Many

"The economic and social significance of this revolution in the country school system is appreciated by very few people. Suppose we had 30,000 consolidated and graded rural schools in this country. That would mean that about two hundred farm homes would be tributary to each school, a total of 6,000,000 families, roughly speaking, or from 20,000,000 to 25,000,000 people brought within the reach of this new and improved educational influence.

"The boys and the girls of the farms would no longer have to be sent away to town to get anything like a fair elementary education. They would be saved from many of the temptations which, under the present system, tend to take them permanently away from the country. Not only this, but these improved rural schools would be provided with special facilities for giving the particular kind of instruction in agriculture, in home economics and in governmental ideals that the future farming population will need."

### Prepare Students for Farm Careers

"Up above this stratum of 30,000 consolidated country schools would be a system of something like county high schools or academies, in which vocational finishing courses would be provided for those who expect to remain on farms. Schools of this type, in Minnesota, Nebraska, Wisconsin and other states, have achieved remarkable success both in preparing students for successful careers on the farm and in convincing them that they ought to remain there.

"In addition to the foregoing, we may project a system of agricultural finishing schools, three hundred to four hundred in number—that is, approximately one to each congressional district. And, finally, at the apex of the system, will stand the state colleges of agriculture and mechanic arts. Already more than sixty of these are actually established. This entire system, from the consolidated rural school up to the state college, must be carefully correlated and unified with the purpose of eliminating friction and wasted effort, and also with the particular view to equipping students for the activities of country-life.

"Many of the high schools in cities and towns, and also a large proportion of colleges which are not primarily agricultural institutions, are already equipping themselves with facilities for doing this very sort of work. In fact, while the outlines of the entire system are quite distinctly developed already, there is more need of development at the bottom than at the top of the structure.

"Take the matter of social relationship and economic organization in the country. Everybody knows that the farmers are the most unorganized, the least unified, element of our population. The very community of interest that would arise from the existence and the necessity of paying taxes to maintain the consolidated rural schools would give a new conception of the advantages of coöperative effort. Each of these rural school centers would become the focus of a constantly enlarging system of civic and social activities. Such fruitful subjects as coöperation in buying and selling would inevitably receive fruitful consideration."

### Authority Which Legislatures Must Recognize

"From this it is but a step to the county federation of rural-life interests, in which would be gathered the delegates from these various school units. Above this again would stand the state federation, composed of delegates from the county organizations; and finally, at the top, would be a national federation in which delegates from the states would meet and consider those large questions which concern the welfare of the rural population, from whose forum the voice of real, representative leadership and authority would speak on these questions in terms which legislatures and congresses would not mistake nor misconstrue."

The consolidated rural school is no longer the dream of idealists. It is an established institution. The record of actual experience in its organization and conduct is ample. Any country township can learn about it through correspondence with Secretary Hays or with the state secretary of public instruction. The literature on the subject is extensive and practical. It represents the longest step yet taken to put rural and city schools on a par. The day of the pioneers in this movement is past. The community which lags to-day has only itself to blame if it falls out of the ranks of progress.

Let the farmers take the step which nobody can take for them, of organizing their schools upon this modern and efficient basis, and the time will not be long before the federal government will be contributing generously to the maintenance of special instruction in those branches which peculiarly have to do with the promotion of the interests of the farming population.

## Sanford A. Knapp

When Dr. S. A. Knapp, head of the Farmers' Coöperative Demonstration Work of the Department of Agriculture, died April 1st, there passed away America's greatest educator. He was teaching the grown people as well as the children of a large part of the nation the way to grow two great staples—cotton and corn. In doing this, he was teaching good farming to us all. His was the system by which all great educators work. "When you tell a man how to do a thing," said he, "he won't believe you. When you show him how, doing the thing before his very eyes, he won't believe you. The only thing that he can really believe is the work of his own hands. What he does himself, he believes."

So he induced people to farm in the right way, and he set the South on fire with the greatest impulse it has ever felt. Doctor Knapp was seventy when he put his hand to the plow; and in seven years he did a great life's work. Once a speaker said, "If I had a great work to do, and ten years to do it in, I should take nine years of the ten to get ready." Doctor Knapp's splendid achievements seem to show that it a man can be sure of seventy-seven years in which to do his task, he may safely take seventy in which to get ready.

To the editor and the readers of this paper his loss is, perhaps, exceptionally great; but the work he did will go on, and the example of his passing, in the midst of the joy of work well done, is one to uplift and inspire us all.

Herbert Quick.

# A Warming Frost

## By William H. Hamby

### Illustrated by Rollin A. Crampton

I AM going to Blue Plains this morning for that new sprayer. Want to go along, Dutchy?"

"I am not Dutch," and she gave her brown head a little indignant toss. "Haven't I told you that the only thing I inherited from my grandfather was my nose—and it isn't turned up but a tiny bit."

"All right then, Frenchy," and Fred Cole smiled teasingly as he got up from the breakfast-table. "But, anyway, do you want to go?"

"Now you are on the right limb of my family-tree. I feel real Frenchy this morning—and I do want to go. I just must have a new dress, and we will get it to-day."

The one who said, "When poverty comes in at the door, love flies out at the window," was a chronic pessimist. But even where love permanently abides, the mere swish of a prospective new dress often brings on an overheated condition of the family atmosphere—followed by a chill and a general downpour.

"No, Nina, not to-day," said Cole soberly.

"For goodness sake, when then?" she flared. "So far as I can remember, I have had two dollars and forty cents' worth of clothes in the three years we have been married." There was sudden accusation, even resentment, in the tone.

"You know, Nina," he tried to keep his voice cool and patient, "what a struggle I have had; how close I have had to figure—"

"Oh, figure, figure," she caught up. "You can find money somewhere to buy old plows and sprayers and lamps—and everything else."

"But, Nina—I have to have those things."

"Oh, yes," petulantly, "but I don't have to have anything. I haven't been home for two years—because I didn't want them to see how shabby I am."

Then he grew resentful and angry, and said those things, which an angry person is apt to say, which were half true, but wholly unjust.

And she—all fire and tow—read a bill of his neglects and shortcomings, which, if true and totaled, would have equaled—a brute.

Cole drove away alone. At the corner, from force of habit, he looked back; but no dainty little figure stood on the porch waving a hand or fluttering a handkerchief. Instantly a feeling of being abused, of resentment, swept over him. But in a few moments, as he drove along the north end of his orchard, he almost forgot it.

Straight as a line for half a mile ran the rows of apple-trees. The carefully cultivated soil, the healthy pink bark of the trunks, and the wide vigorous branches indicated years of excellent care. And now, almost as far as the eye could see, was a gently undulating billow of green and white and pink. It looked as though every one of the thirty-two hundred trees was fairly overflowing with blossoms.

There was more than the pride of ownership in the young man's eyes as he ran them lovingly over the long sweep of his eighty-acre orchard, picking out here and there, by bark or blossom or size, the different varieties. There was more than anticipation in the young man's heart as he looked on his orchard in its first full promise of a rich harvest. Deeper than the pleasure of possession, stronger than anticipation of rich financial returns, was the joy of work well done. By skill and patience and knowledge he had grown that orchard. It was the work of his hand. With science and industry and grit he had fought the scores of enemies in earth and air of the young trees, and had won. It was a beautiful victory.

Young Cole had reasons to feel proud of his accomplishment. Six years before, when he bought the place, it was one of the poorest, worst run-down farms in that section of the Ozarks. It had been one of the first farms cleared in south Missouri. And since the days of Andrew Jackson, a long procession of tenants and owners had gone on making the poor soil poorer by trying in a foolish, primitive way to grow grain where grain was not meant to grow.

None of them had ever discovered—or tried to discover—the real use of the land, until Fred Cole, a thinking, investigating lad of twenty, got it into his head to buy the farm. He got the eighty acres for five dollars an acre. And the man who sold it to him told him encouragingly—after the deal was closed—that he had intended to give it away if he hadn't sold it—it was not worth paying taxes on.

But the young man went to work. He borrowed money, and set the whole eighty acres in choice four-year-old apple-trees of the finest varieties. Then he went straight to the state university and entered the agricultural college.

During summer vacation and by taking two weeks in the spring and fall he kept the young orchard in growing condition. And in his course he specialized on horticulture and put into immediate practice what he learned.

It was while in the university that he met Nina, who was a student in the academic department. Immediately after graduation they had married and moved onto the farm in the Ozark hills.

The first year the trees were too young to bear much. The next year a late frost killed all the blossoms. But this year promised wonderful returns. Why, if nothing happened, they would average a barrel to the tree—and that would be—but it was not safe to count.

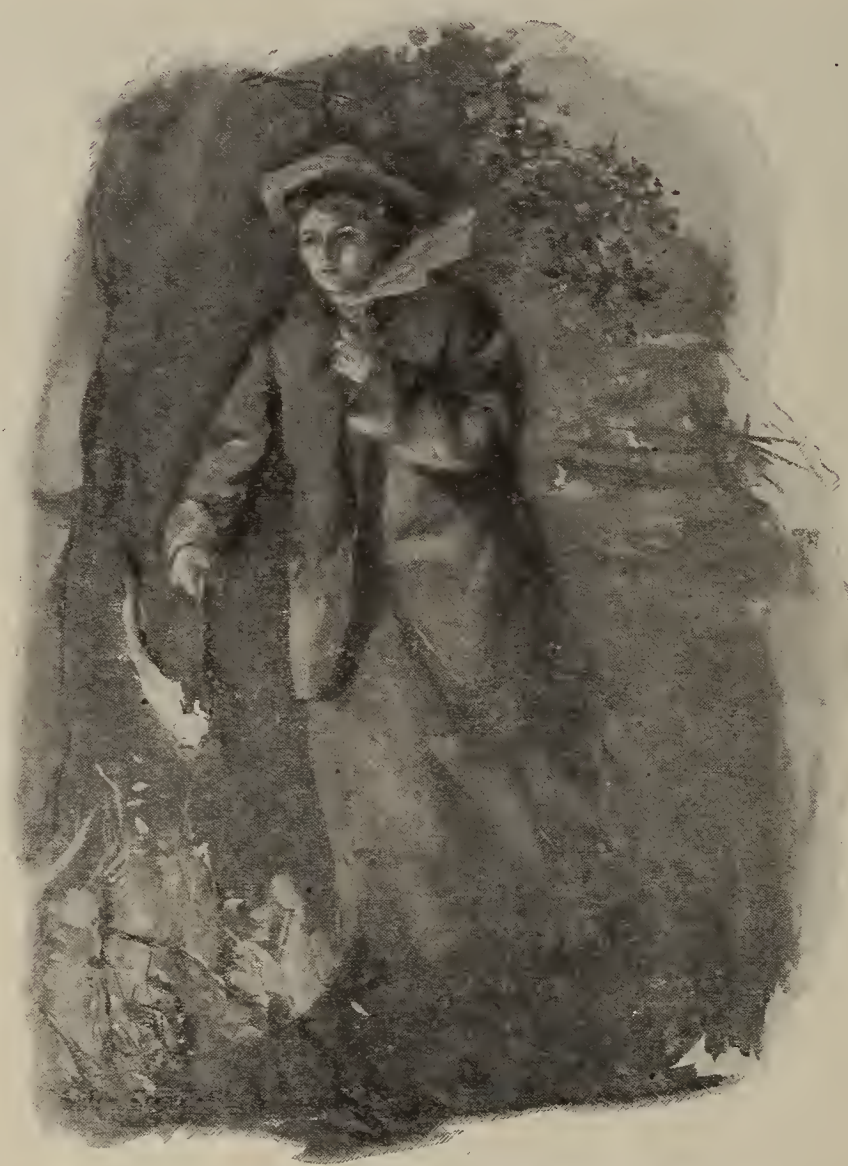
He had driven slowly across the end of the orchard. At the corner, where the road turned north into the woods, he looked back again. The pretty cottage just west of the orchard was on the highest point and could easily be seen. Sometimes she waved again—

But no, she was not in sight. His face grew hot, and he drove rapidly away, nourishing a sense of being wronged, of being badly treated.

And, man-like, the more he thought of it, the worse she seemed to be in the wrong, and the surer he was that he was entirely free from blame. Not satisfied with that conclusion, he went on piling up arguments until he seemed to be very badly abused. He had had to borrow money—much of it was past due; the crops last year had failed; he had been hard pushed, and often could hardly see how the ends could be made to meet. She had no right to ask for a new dress—not now. She had more clothes than lots of women—he could not see that she was so very shabby. And she did not have such a hard time; he hired the washing done and carried in the wood—and she, not being much of a farmer, only worked with the garden or chickens when it pleased her—he attended to all that.

But—also man-like—he overdid it. He piled his arguments too high. He had reasoned out such a strong case against her that his heart involuntarily exclaimed, "Poor little Dutch." And by the time he topped Wayne's Hill and looked back across the magnificent roll of hills and green valleys stretched out for thirty miles south, and began to try to locate his own little home, the argument was all piled up on the other side, and he was very much of a beast.

She had always lived in town, he told himself, and



"He saw a familiar little figure, wearing one of his old coats"

was used to everything, and had lots of company. And to take her away off in the hills—it was four miles to the nearest town—and keep her a prisoner for want of clothes—why, it was awful. And she had been so plucky and bright. The best company in the world—and the bravest little girl— And on and on he went. Which, also, was like—some men.

He drove on a little more rapidly. He would hurry home and tell her all about it. And when the big apple crop was sold, she should have all the clothes she wanted, and they would spend at least one evening in town with friends or at entertainments, and she should go home as often as she wished.

It was nearly noon when he reached Blue Plains. After he had fed his team and had his dinner, he drove out two miles west to the state fruit experiment station to see the new sprayer at work before he bought one.

Mr. Baird, the director, had gone to a neighboring orchard, but would be back at 3 o'clock.

The young man waited with considerable impatience, for it would make him late getting home. It was 3:30 o'clock before the director returned.

"Whew!" shivered Cole as they went out into the orchard. "The wind has gone to the northwest. Sharp, isn't it? Don't suppose it will frost, do you?"

"No danger to-night, I think," said Baird. "It is going to be cloudy. But if it blows like this and then clears to-morrow, look out for to-morrow night."

"I'm fixed for it this time," said Cole. "Got four thousand crude-oil burners and plenty of oil. I'll light up at the first sign of danger."

It was 5 o'clock by the time the young farmer had purchased his sprayer and was ready to start for home.

"Whooee!" he whistled as he climbed into the spring-wagon. "It's getting cold in a hurry. Guess I better get out my burners to-night."

It was twenty miles home, and very rough road. It usually required five hours, but he meant to drive it in four this evening.

The wind had risen until it roared in the trees. It felt damp, and stung like the breath of a young blizzard. At 6 o'clock the sky was thickly overclouded. Cole's teeth fairly chattered, for he had left his overcoat at home.

But when he reached the top of the next hill, there was a rift in the west—the scurrying clouds had parted, and a cold strip of red sky showed through the trees. Cole looked at his watch. It was 7 o'clock, and he was not quite half-way home.

He drove on briskly, feeling a little uneasy. When he topped another hill, the sky was swept almost clear of clouds, and the wind was dying down. It was nine miles and a half home. He lighted a match and looked at his watch. It was twenty minutes past eight.

Cole felt the chill in the air and on his face and hands—and a colder chill crept through him. Now there was indeed danger, and he was two hours from his precious orchard; and the burners were empty in the orchard, and stacked in the barn were the barrels of crude oil.

He kept telling himself that it would not frost; it only seemed cold because it had been so warm. Yet the air nipped his nose and fingers, and the wind was very still. He urged his horses to an almost reckless speed. As he passed an old clearing that he recognized, he again looked at his watch.

Nine o'clock, and still six miles from home.

As he went down into the next valley, dark from the heavy shadows of the timber that walled the road, he put out his hand and plucked a young hickory-leaf.

It crinkled in his fingers.

His heart gave a thump—it was frosting already. Why hadn't he started earlier; why, of all days, had he left on this—eighty acres of the finest blooms in the world; protection stored in the barn, and frost creeping and creeping upon the million precious blossoms—while he was miles away.

He was already bumping recklessly over rocks and ruts and into gullies; up steep hills and down into narrow valleys; but he leaned forward in his seat and shook the lines over the horses' backs.

Surely he would get there in time—he just couldn't lose now after all these years of work and waiting. Again he snatched some young leaves from a bush beside the road. There was frost upon them—no doubt of it.

Were they already killed? He felt sick at the thought of it. Although the blossoms were in the state susceptible to a killing frost, still he believed he might get there in time to save some of them—if it only would not freeze.

He started down into the last valley. Just up the next hill and down a long ridge, and he would be home. When he reached the bottom of the hill, his team was in a gallop. Ahead the shallow little creek spread out across the road. He leaned forward and stared hard into the dim starlight—the water looked white. And when the horses struck it, there was a crinkle and a light crash. Cole leaned back and groaned. He was too late. It was ice. He drew his horses down to a walk—no use to hurry now.

As he came down the woods road near the corner of his farm, he suddenly straightened up and sniffed the air—he had caught the whiff of a peculiar smell. He struck his horses sharply and galloped into the road at the corner of the orchard.

He drew up suddenly, and sat and stared. For half a mile, a solid mass of smoke hung lazily in the air, completely enveloping the orchard so he could scarcely see the outlines of the trees—and all down the long rows burned the crude-oil lamps.

He drove along slowly, wondering, amazed. A stir of wind parted the smoke near the road, and he saw a familiar little figure, wearing one of his old coats, hurrying between the rows to light the last burners.

His throat contracted; something stung his eyes. He was over the fence in a minute.

"Why," she said laughingly, when they were by the fire in the cottage, "there is no wonder about it at all. I am not much of a farmer, but I knew an hour by sun that it was going to frost, and I got Mr. Jones and Mr. Wagner and the Smith boys to help. They drove the oil-wagon and filled the burners you had placed along the rows, and I came after them with a torch and lighted the oil. It was lots of fun."

He had already told her of all the things he had thought and planned during his long ride. There was really not much left to say, but as he arose to start back to the orchard to watch the burners through the night of frost, he looked at her fondly and shook his head:

"Well, you must be Dutch—for you can't be beat."

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TO OUR READERS:—It was a great pleasure to the Editor of FARM AND FIRESIDE to receive the hundreds of letters from our readers telling him just how they liked "Poor Relations." He thought it was a good story, and naturally it pleased him to have the readers think so, too. Now he wants to know how you liked that detective story that was finished in the last issue of FARM AND FIRESIDE—"The Room of Many Shadows?" Do you like detective stories, anyway, and when you get a chance, won't you sit down and tell him what you think of this story by Anna Katharine Green? He will appreciate your letter. Address Managing Editor, FARM AND FIRESIDE, Springfield, Ohio.

# Letters From a Country Sister

## Getting Away From Drudgery

Dear Martha:—

In a former letter I told you I had "an awakening" and promised to tell you something of what caused it and what its results were for me. One thing I have learned recently is that we country women get buried in our work. It takes all of our time, most of our energies and the best part of ourselves. That is because work has become drudgery for us, whether through our own fault or because of circumstances. Good, honest work does not sap vitality, it is only drudgery that does that, drudgery that has no beauty, no rest in it.

It came to me all of a sudden that I had almost lost the sense of beauty in my surroundings, lost it to such a degree that if anyone had asked me to describe my home, I would have made an unattractive picture of it, when really its setting of trees and green hills is beautiful.

Do people who live in the country become satiated with beauty? Are sunsets, green slopes, wide-spreading trees such commonplace things in their lives that they fail to see anything of interest in them, or is it that hard, grinding drudgery robs them of all appreciation of it? I really believe the latter is right and I'll tell you why I think so.

Last June a school-girl friend, whom I had not seen for many years, came from her home to visit me. This friend led a busy life like myself. Home, children, and all that those blessings entail were her portion. But her attitude toward her work, which was centered in a farm home, too, was very different from mine.

She had worked hard, but she had not become a household drudge. Every evening she insisted that I go out in the garden with her to watch the sunset deepen into twilight and to listen to "nature's good-night song" as she called it. At first I pleaded lack of time and belated bits of housework, but in the end my duty as hostess conquered and I went with her. But while she seemed to thoroughly enjoy the chorus of sounds which fills a June evening at the twilight hour, and while she reveled among the pansies and roses, I fretted because there were weeds in the flower-beds and the music of nature's orchestra was lost on my ears because of the imaginary clatter of pots and pans calling to me from the kitchen. It was so long since I had really and truly given myself up to enjoying anything that did not spell work that I had almost lost the faculty.

When my friend went home at the end of the week she said as she bade me good-by, "Sarah, do get a hobby of some kind. Do something that can't be counted in your routine work and don't forget there is beauty and rest all about you."

At first I was nettled, almost regretted my friend's visit and felt a twinge of something that perhaps was akin to jealousy when I thought of her quiet, contented face that looked years younger than mine, though we are about the same age.

In a few weeks a small package came from this friend. Opening it I saw a small picture neatly framed in darker wood. It was a picture of a flock of sheep and a shepherdess going home in the twilight. With the picture was a note from my friend explaining the subject of it and giving a bit of the artist's history. It seemed he preferred to paint common country scenes and peasant people more than he cared to paint city scenes and grand people. My friend expressed the wish that I might enjoy the picture as much as she did. "It is a real friend to me," she wrote, "and always rests and quiets me after a hard day's work."

Well, I didn't see much beauty in it and told Hiram it looked just like our own sheep; if anything, not so pleasant to look at because of the slip-shod woman who was driving them. But I hung it up in the living-room. It happened I chose a place for it that I had to pass many times a day going into and out of the kitchen. At first I thought very little about the picture, but after a week or so I found myself looking at it quite often, and by and by I was conscious of its restful quiet. Then I noticed that I was looking at the sunset and one evening I saw our own sheep coming up from the pasture and I felt the same thrill of rest and peace that of late had come over me when I stood before the picture.

Now I can see so many beautiful things about my home. For the first time in my life I am learning to appreciate our glorious sunsets, the gracefulness of the elm in the pasture near the house and I am learning to love the melodies in nature's evening song.

How do I get time to spend so many minutes out of doors? Well, I just take it, that is all. I suppose I have just as many duties to perform as ever, but I am determined not to be a drudge. I'll be a worker—an honest, hard worker, too—but I won't be a slave to my pots and pans.

Then I have told you in other letters how I am trying to save time, effort and strength by spending a few dollars on house equipment now and then. If you haven't found out for yourself, as I hope you have, you will be surprised to know how far twenty dollars or even ten dollars, wisely spent, will go toward making a farmer's wife happier and giving her more time to develop the mental and spiritual side of her nature.

*Your Country Sister*

# When the Children Study

## By Alice M. Ashton

"Our evenings have been a dread ever since Richard began bringing home his lessons!" exclaimed a mother of my acquaintance. "We do not understand just what is required of him and do not know how to help him, yet he seems constantly in need of help."

This is a cry we hear incessantly, and even very intelligent parents seem powerless to help fifth-grade children do a problem in simple fractions. To one never trained to teach, this is a difficult task, but since it is required of most parents, a few simple rules of teaching will help.

First—and of most importance—always remain quiet and pleasant; nothing so confuses a puzzled child as an excited or impatient instructor. Never make your child dread his study-hour if you are ambitious to make a good student of him. This quiet self-control will teach more than one lesson to the young mind.

Talk as little as possible and make your point clear; have the child do the talking.

Hold strictly to the point you are trying to impress; remember that even that simple fact is a confusion in the child's mind, and that nothing more should be introduced until that is perfectly clear. It is a great temptation for the mature mind to pour out its store of hard-acquired knowledge, but the temptation should be conquered until the child is ready to receive it, as it will otherwise only confuse the child's ideas and rob him of the simple fact he should have learned.

Little reasoning power should be expected of a child under the age of thirteen, but great dependence may be placed on his ability to memorize. That is why the patient and repeated going over of one simple fact will help a young child more than an excellent discourse, even though simple enough for his comprehension.

Comparisons are good, in explaining a knotty point, but great care must be taken not to allow them to be complicated. Choose the best comparison you can for the occasion and then stick to those two facts until it is clear—the every-day fact well known to the child and the unknown which is still in the same class with the known. After a while it will all become plain and a great lesson will have been learned with a few words and no confusion. This is especially true with mathematical problems.

When a fact has been learned or a problem conquered, never leave it until the child can give an intelligent explanation from start to finish without prompting. I have always thought that one thing well learned is worth many things partially acquired.

Endeavor to give the child a broad idea of his school work, by showing him places where this knowledge will be a benefit in his business and social life; in this the parent can do much more for the child than the average grade teacher.

Most parents are woefully ignorant of what their children's school life really is—yet is this ignorance necessary? This world is a busy place for most parents; still one hour each month spent in the school-room will prove a wonderful enlightener for that evening study-hour. The most impartial teacher cannot help feeling additional interest in the child when the parents show interest. Nothing so pleases and delights a child as to feel that mother knows about his school work and comes frequently to see him do it. Such kindly interest has often infused a poor teacher with ambition and made her a good one, has made a dull pupil into a bright, alert student and has transformed an indifferent mother into an interesting and progressive woman, abreast with the many improvements of the present day.


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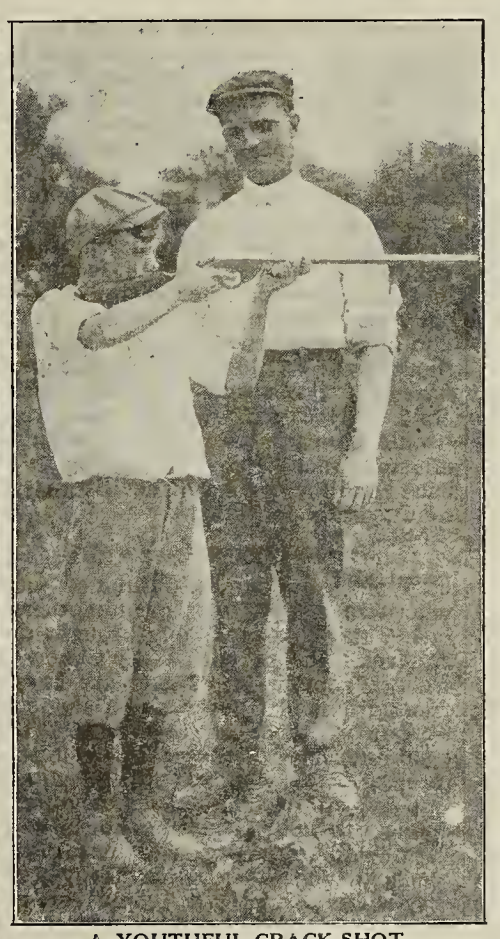

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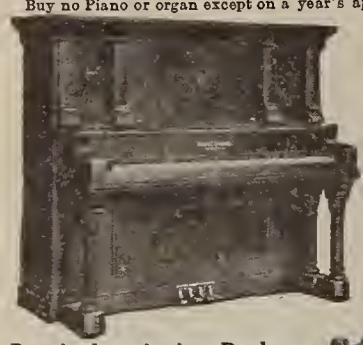

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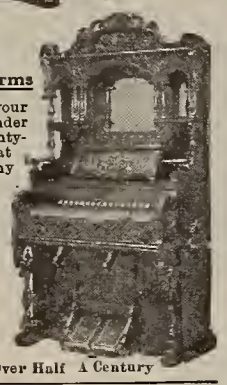

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| Sweet Bunch Daisies | Steamboat Bill |
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| Winter | Any Little Girl that's Nice Girl |
| Kiss Me My Honey | By Light of Silvery Moon |
| Star of the East | I've Got Rings on My Fingers |
| Senora, "A Gem" | That Beautiful Rag |
| Stop, Stop, Stop | Dublin Rag "Madam Sherry" |
| Red Wing | Silver Threads Among the Gold |
| Think It Over Mary | Mesmerizing Mendels'n Tune |
| Daisies Won't Tell | Put On Your Old Grey Bonnet |
| Yip-I-Addy-I-Aye | When Autumn leaves are falling |
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| Red Wing, Two Step | Beautiful Star of Heaven |
| Turkey in the Straw | Ben Hur Chariot Race |
| Rag-A-Tag-Rag | Wedding of Winds Waltz |
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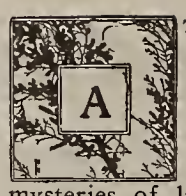
# The Home Interests' Club

## By Margaret E. Sangster



AT THE first meeting of the Home Interests' Club, the subject under discussion was one that has forged to the front in recent days. "What shall we tell our children concerning the mysteries of life and being" is a question of vital importance in the minds of many conscientious mothers. Shall we do as our own mothers did, and maintain reticence, even to absolute silence, on all those matters which puzzle little children, and about which they are naturally inquisitive?

Shall we, on the contrary, take the earliest opportunity of showing the analogies of nature in the life of flowers, of birds and of beasts, comparing these with our human lives, and breaking down those walls of silence which by common consent have for ages held childhood apart from premature knowledge? Which is the better protection for boys and girls as they approach adolescence, ignorance or information? How are we best to maintain purity and shield innocence in days when these are menaced by perils hitherto unsuspected? Is it better for our children to be brought up in seclusion at home under the maternal eyes, or shall they be allowed to play freely with all sorts and conditions of children, and when they reach the school age, shall we try to have them educated in private schools or send them to that fitting arena of American children, the public school?

### The Minister's Wife's Opinion

Confronted with several aspects of the same question, it was not possible to deal with them all in a single afternoon between the hours of three and five. The minister's wife, who was the hostess of the day, presented the topic for discussion. She asked pardon for relating a bit of personal experience in a former parish. She had found great difficulty in guarding her little daughter, five years old, from the whispers and wrong suggestions of an older child aged eight, who frequently came to the parsonage and spent the afternoon.

"It has always been my custom," she said, "to sit near my children with a bit of sewing and to have them play in the room with me or in the garden within hearing distance. Amy, the little visitor, was a sweet-faced and gentle-mannered child, and her mother was my friend.

"It was not long before I discovered that she was one of those little girls who, for some strange reason, are excessively curious about everything which is usually kept in reserve when children are present, and I did not quite like the way she had in talking with my little Florence. I was in great doubt what to do, but as I was expecting before long that Florence would have a little sister or brother, I acted on my own initiative and took my little daughter into my confidence.

"I tried to speak to Amy on the subject of her mysterious behavior with Florence. She flushed deeply and tears came into her eyes, and for some days she did not come to the parsonage. Later, her mother told me that I had hurt Amy's feelings, and had misunderstood her entirely. A little coldness sprang up between Amy's mother and myself when I frankly said that I thought she would do Amy great good by having a frank and plain talk with the child. 'Not for worlds,' she replied, 'would I invade the realm of her mind by allusions such as you are making to Florence as to the coming of her Brother John or maybe Sister Jane.'"

### A Grandmother's Viewpoint

"Well," said an old-fashioned matron, who was a benignant grandmother, and in her day had creditably brought up ten children, "for my part, I don't know what we are coming to. I had six boys and four girls, and I never said a single word to one of them on any subject that I would not have discussed openly in prayer-meeting. My children were active and healthy, full of fun, busy as they grew old enough to help about the house and the farm with the chores and tasks that fell to them, and when a new baby arrived, they were perfectly delighted and not in the least surprised. No fuss was made about their training, except that they must be obedient, obliging and truthful.

"I think those who know me will bear me out in the statement that my boys grew up into clean manhood and my girls into sweet womanhood, and that they are taking their share to-day in the world's work. It seems to me that we needn't go back farther than the Garden of Eden, though, of course, that is as far as we can go, to get an idea worth considering. The Lord put Adam and Eve in a garden, and a good place it was to be put in. He didn't set them down in the midst of a big city, though, of course, if He had, He would have had to create a city on purpose with a million or so of Adams and Eves. No, He just set those two people in the middle of the loveliest garden that eyes ever saw, and He made them free of everything, except of one tree. He told them that they were never to touch that tree or eat its fruit, or go anywhere near it. They might do what they liked, morning, noon or night, so long as they let that particular tree alone. So, of course, the thing happened that might have been expected. Adam, poor man, may have been a little dense, men being slower witted than women, and more apt to take their time; but Eve kept thinking about the tree every single minute, and, as she hadn't so much work to do as we had, the tree, got on her nerves. If there is one thing in life that you are told never to talk about, never to think about, never to approach, that will be the thing that will be uppermost in your minds. This is why I am opposed to saying anything at all to children about the mysterious things which do not concern them until childhood is past."

### What the Doctor's Wife Said

The doctor's wife had something to say: "I am sure if my own dear mother were here, she would perfectly agree with everything our friend has just said. There is a strong sentiment on the part of many thoughtful women against premature revelation to little children, and especially against unwise prohibitions and unjust suspicions. It may easily be that when children are playing together they may have their little secrets and their withdrawals from older people without so much as an impure thought.

"Children live in a world of imagination, and during the first ten years of life boys and girls may play together without the thought of sex intruding itself at all. There comes a time, as the boys reach the period when the tides of youth are rushing in and when the girls are stepping toward the brook which they cross to womanhood, when father and mother should stand guard over them and when they should not be left in ignorance of physical developments and tendencies. Every physician can bear testimony to the mischief that comes to pass through foolish reticence on the part of parents at the critical moment when children cease to be infants and pass into the earlier stages of maturity.

"When your daughter arrives at her thirteenth birthday, she then is no longer a child to be kept in ignorance of herself and of her physical life. For reasons which every mother understands, it is her mother's privilege then and her sacred duty to tell her all that she ought to know, and thus keep intact her health and innocence. If this is important for girls, it is equally as important for boys, who, in their teens, should be safeguarded against dangers which may meet them at school or college, or in the realm of business.

"My husband says that there is nothing coarse in speaking at the right time and place of the facts of nature to young people who must meet the world as it is, but he is not in sympathy with the new ideas which are exploited as to taking little tots of five or six and explaining to them the whole machinery of the body, while they are little more than babies. You do not teach trigonometry to a child who does not know the multiplication table, nor expect anyone to read De Morgan and Chesterton and Arnold Bennett before mastering the alphabet." Here the minister's wife somewhat timidly again interposed.

Did I say, as hostess on the occasion, she ought to have been in the chair? Well, as it happened, it had not occurred to the club to have an organization, to be parliamentary or to elect officers. The time had not arrived when they thought this essential to having a worth-while comparison of opinions and a good time together.

### No Jealousy for the New Baby

"Do you think," anxiously inquired the mistress of the parsonage, "that I made a mistake when I prepared my little daughter for the appearance in our home of a strange little being, whose helplessness would for a while monopolize much of the attention which had previously belonged to an only child? I had thought the whole matter over, had consulted Florence's father, and I am not ashamed to confess that I had prayed to be guided. I have seen a good deal of unhappiness in homes where little children were jealous of a new baby. When one considers how important a child has been, reigning as a little king or queen, and how extreme the fall is when suddenly another child takes the throne, one can easily understand that love may not rush in like a flood, and that baby number one may have a heartache over baby number two.

"My plan worked well with Florence. I simply told her that God was going to send a little sister or brother, I was not sure which, and that the baby would be hers to love and care for, with my help, and by and by to play with, and be much better than a doll, than the prettiest doll that money could buy. She helped me furnish the basket and saw the little clothes and the baby's crib, and from the hour when she first kissed her tiny brother her cup overflowed."

"You did entirely right, and what you did any woman can do without overtreading by a single step the boundary that common sense and modesty long since built for the protection of childish innocence. At least, that is what I would say," exclaimed a lady who had previously been silent.

### What the Maiden Aunt Thought

"What would you do," asked a jolly little woman, whose face was full of merry dimples and who looked as if she had never had a care in the world, "if, instead of being a mother, you were a maiden aunt, at everybody's beck and call, as I am, or if, like my neighbor in the next rocking-chair, you were a step-mother with three sets of people watching every movement you made, criticizing every word you said and resolving to put you in the wrong nine times out of ten, just because of that little word 'step?' I very much doubt," she went on, laughing, "whether there are two women in this room more motherly than Mrs. McIntosh and myself. I am Aunt Jemima and am popularly supposed to spoil my brother's children. She is bringing up a lively, wide-awake set of small people, to the best of her ability, and her own family are convinced that she is too indulgent, while the children's grandmothers, aunts and cousins on both sides are equally convinced that she is far too severe. I give you my word, I might be matron of an orphan asylum, but I never would undertake the office of step-mother. It is such a thankless task."

The little step-mother, who by no means looked crushed under the weight of her responsibility, smiled like a sunbeam. "I love children," she said, "and I hope I understand them. As for what other people think and say, I am not very much troubled. I made up my mind a good while ago that children are a good deal like plants. They flourish best in the right atmosphere. You don't have to think all the time about pulling your flowers up by the roots to see if they are growing, and they don't need pruning every day, and I really do not believe that they must be disciplined continually, as if they were soldiers on parade. I like," she went on shyly, "to remember that Jesus said: 'Suffer the little children to come unto me, and forbid them not, for of such is the kingdom of heaven.'" The little step-mother had struck the right note and everyone felt as if a waft of perfume had swept through the room.

### How the Meeting Should End

At this moment a diversion was made by the entrance of two young girls, one with a violin, and the other with a roll of music. The hostess explained that she had invited two of her friends to give them a little music. When the duet had been encored, tea and wafers were brought in with an accompaniment of peculiarly delicious crisp nut-cookies. Conversation became general. Something to nibble, to stir and to sip may be counted upon to make any social afternoon agreeable and successful.

The tea was perfect. It had not been brewed too long. It had been made with freshly boiled water, and was served in the delicate little cups which had been sent from Japan to the minister's wife, as a wedding present from some missionary friends. Her Japanese tea-set was so beautiful, and her cups and saucers so appealed to the ladies present, that she told them the whole interesting story of a visit to Japan in her girlhood, of the wonders of the country and of the missionary life of a dear schoolmate in Tokio. The club broke up with cordial leave-takings and the promise to meet again in a fortnight. Everyone was eager for the next meeting. There was some talk of asking the principal of the high school to prepare a paper, but nothing was decided upon in that direction, but something helpful and practical was surely to be discussed.

Correspondence is invited. Write freely, and if a letter is intended for publication, let it be brief. Letters, accompanied by self-addressed stamped envelopes, will receive a personal reply. Address Margaret E. Sangster, FARM AND FIRESIDE, 381 Fourth Avenue, New York City.

# Miss Gould's Dressmaking Lesson

## A Silk Dress for Six Dollars and Thirty Cents

THE dressmaking lesson this month goes into every possible detail of the making of the pretty foulard gown illustrated on this page. It explains not only just how to make the dress, describing carefully each step, but it tells just exactly how much the dress will cost.

An itemized account of everything required for the making of the dress, even to the patterns, will be found on this page.

The material is a dark blue foulard with a white design, combined with plain dark blue silk. The buttons are covered with blue silk.

The underblouse is of white figured net. This is an entirely separate garment, which fastens at the back. It is an economical plan to have two underblouses for a dress of this description. One may be of white net or all-over lace and the other of dark blue chiffon or tucked marquisette. Then, too, if you care to have short sleeves in one underblouse, they may be cut off just below the elbow.

The pattern No. 1715, Bolero Waist With Underblouse, is cut in six sizes for 32, 34, 36, 38, 40 and 42 inch bust measures. The pattern envelope contains ten pieces. Four of these pieces belong to the bolero waist and are lettered as follows: The front and back in one piece M, the collar Y, the girdle Z and the belt X. The six pieces for the underblouse are lettered: The front V, the back T, the collar L, the belt A, the upper sleeve K and the under-sleeve F.

These letters are perforated through each piece of the pattern to identify it. Our method of lettering the WOMAN'S HOME COMPANION patterns is particularly helpful to the amateur dressmaker, assisting her to select the different parts correctly. For instance, in this pattern there are two belts, and one can tell at a glance, by the letters, which one belongs to the waist and which one must be used for the underblouse. Without the letters one might confuse them and use the wrong belts in making up the two waists.

Before placing the pattern pieces on the material be sure that all the little wrinkles in the tissue have been smoothed out. Then place the edges of the bolero back, bolero collar and girdle, the underblouse front, belt and collar marked by triple crosses (XXX) on a lengthwise fold of the material. Place the bolero belt, the underblouse backs and sleeve portions with the line of large round perforations in each lengthwise of the goods. Be careful to mark all the perforations and cut out all the little notches before removing the pattern pieces from the material.

### To Make the Underblouse

Join the front and backs by corresponding notches. Bring the lines of small round perforations together and pin before basting. Gather the front of the underblouse at lower edge between double crosses.

Join the belt to the lower edge of the underblouse as notched. Match the centers of the blouse and belt, back and front, and bring the large round perforations in the belt to the under-arm seams. Pin the belt securely to position.

Now try on the underblouse and make any corrections required before basting. Perhaps it will look well to draw the fullness a little nearer to the front, leaving more plain space under the arms. This is usually more becoming to a stout figure. Or, in the 32 and 34 inch bust sizes it may look well to have the gathers extend all around to the under-arm seams. These changes can be easily made before the belt is basted to position.

Join the collar to the neck of the blouse as notched. Turn hems on the collar, the backs of the underblouse and the belt according to notches and fasten the blouse invisibly. Very small hooks and loops should be used for this fastening and they should be placed quite close together, not more than an inch and a quarter apart. You should sew the hooks on the right side of back first, measuring the distances between them carefully. Then pin the backs together and mark the places for the eyes opposite the hooks.

Join the upper and under sleeve as notched. There is a slight fullness in the upper sleeve at the elbow which should be eased in between the notches. Gather the sleeve at the upper edge between double crosses.

Always hold the sleeve toward you when arranging it in the arms-eye; with the sleeve in this position, place the notch in the top of the sleeve at the shoulder seam and bring the front seam of the sleeve to the notch in the front of the blouse. Pin securely at these two points. Pin the plain part of the sleeve smoothly in the arms-eye. Now draw up the gathers to fit the remaining space, distribute the fullness evenly and pin before basting. Use plenty of pins in doing this part of the work, for they will hold the sleeve in place while you are basting it. The net is very fine and will not stand a great deal of handling, so it is better to take a little extra care and have the sleeve put in correctly at first than to rip it out and readjust it.

If you have to rip at all, do not draw up a long basting and then break it. Cut each stitch and pull out the short threads one at a time.

There is a seam allowance of three eighths of an inch on all edges of this pattern, except at the shoulder and under the arm, where a one-inch seam is allowed, designated by lines of small round perforations. After the underblouse has been correctly fitted, stitched and pressed, this additional material should be cut away and only the regulation three-eighths-of-an-inch seam permitted to remain.

The waist is very conveniently made in one piece without any shoulder seam and is the simplest sort of a little garment for the home dressmaker to put together.

**No. 1715—Bolero Waist With Underblouse**

**Pattern cut for 32, 34, 36, 38, 40 and 42 inch bust measures. Quantity of material required for medium size, or 36 inch bust, two and one eighth yards of twenty-three-inch, or one and one eighth yards of thirty-six-inch material, with seven eighths of a yard of contrasting material for trimming and one and three eighths yards of forty-inch material for the underblouse**

**No. 1716—Skirt With Buttoned-Over Panels**

**Pattern cut for 22, 24, 26, 28, 30 and 32 inch waist measures. Length of skirt all around, 41 inches. Quantity of material required for medium size, or 26 inch waist, five and one eighth yards of twenty-three-inch material, or three and one half yards of thirty-six-inch material, with one fourth of a yard of contrasting material for the cording. The price of each pattern is ten cents**

**The Itemized Cost**

| | |
|---|---|
| 7¼ yards of figured silk, 23 inches wide, @ $ .50 | $3.63 |
| 1⅛ yards of plain silk, 19 inches wide, @ $ .58 | .66 |
| 1⅜ yards of white net, 40 inches wide, @ $ .50 | .70 |
| The making of one dozen buttons | .40 |
| One card hooks and eyes | .10 |
| One pair dress-shields | .25 |
| One spool of basting-cotton | .05 |
| One spool of white cotton | .05 |
| Two spools of blue silk | .20 |
| Three spools of blue twist | .06 |
| Two WOMAN'S HOME COMPANION patterns, @ 10 cents each | .20 |
| | $6.30 |

Close the under-arm seams and sleeve seams (which are really only one continuous seam on each side of the waist) by matching the notches carefully. After the seam has been stitched you will have to slash it on the curved portion. Have the slashes very near together and let them come quite close to the machine stitching. When the waist is turned right side out the short cap sleeve will hang gracefully.

Gather the waist at the lower edge between double crosses. Turn hems on the belt by notches and then join it to the lower edge of the waist as notched. Match the centers of the waist and the belt at the back and bring the large round perforations at the sides of the belt to the under-arm seams. We have given the entire belt pattern so that you will not have the least trouble in joining the belt to the waist. It fastens at the left side of the front.

Join the collar to the waist as notched. Sew large buttons at the points of the collar and pass loops of silk cord over them to keep the waist together.

Finish the edges of the sleeves with bands of the material one and one half inches wide. Make the bands first. Then turn up the lower edges of the sleeves three eighths of an inch. Turn the three eighths of an inch on the right side and apply the bands, having the lower edge of each band come exactly to the lower edge of the sleeve. This will entirely conceal the turned-up seams and make a very neat finish.

Turn hems on the girdle by notches, then gather at the ends between double crosses and arrange around the waist, matching the lower edges. The girdle may be fastened at the left side over the closing of the belt.

### To Make the Skirt

The pattern No. 1716, Skirt With Buttoned-Over Panels, is cut in six sizes for 22, 24, 26, 28, 30 and 32 inch waist.

The pattern envelope contains four pieces which are lettered as follows: The front panel E, the side gore M, the back panel H and the belt A. In cutting lay the edges of the front panel and the back panel marked by triple crosses (XXX) on a lengthwise fold of the material. Place the side gores and the belt with the line of large round perforations in each lengthwise of the goods.

Turn in the side edges of the panels three eighths of an inch. Baste with a small stitch and do not stretch these edges. It is not an easy matter to turn bias edges like these and keep them in shape, so give this part of the work extra attention.

Finish the edges of the panels with fine cordings. Use straight strips of silk to cover the cords, then they will keep the panels from stretching out of shape. Lap the front panel over the back panel at each side, matching the lines of small round perforations, and button.

Sew the buttons on the back panel directly along the line of perforations and work the buttonholes on the front panel, bringing the back edge of each buttonhole just to the corresponding line. Perhaps you would like to finish the buttonholes with silk cordings. If so, it would add to the effect of the trimming.

Now, place the right side gore flat on a table. The front side of this gore is indicated by the line of three large round perforations. Arrange the panels on the right side gore, bringing the edges of the panels to the lines of small round perforations on the gore and pin securely to place before basting. Use plenty of pins at the curve over the hips because the panels might pucker at this point unless they are pinned and basted perfectly flat.

Arrange the panels on the left side gore in a similar manner, but leave an opening at the left side of the front panel as far as the large round perforation. The usual depth of a placket opening is twelve inches, but if you find that the skirt will slip over the hips comfortably with the placket only ten or eleven inches deep, make it shorter by one or two inches.

Take up the darts in the side gores by bringing the corresponding lines of small round perforations together. Join the skirt to the belt as notched and fasten at the left side of the front panel.

The pattern is given for the whole belt which extends around the top of the skirt and laps an inch at the side to correspond with the skirt.

Sew the hooks and eyes at the side opening quite close together. Have the eyes directly on the line of small round perforations on the left side gore and sew the hooks at the edge of the left side of front panel, directly opposite the eyes.

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# Sunday Reading

## How Much Do You Care?

By Edgar L. Vincent

"I know jest how ye feel, mister! I'll lend ye five cents!" He was just a little bit of a chap, with a big bundle of papers tucked under his arm. On the car near him was a poor crippled man who had forgotten his money, so that he did not have enough to pay his fare.

"You'll have to get off, then!" the conductor said, reaching for the cord. Then the lad with the big heart came to the front. He knew how it felt to be in such a position. Quick as a wink he had the nickel out of his pocket, the fare was paid, and the poor lame man snuggled the lad up to him and thanked him over and over again. It cost the boy something to hand out that five cents. It cost the man more to take it; but the costliest thing of all, the thing that was worth most, was to feel that the boy cared enough to make this sacrifice.

How much do you care when those about you are in a bit of trouble?

It is a great thing to have a heart big enough to take in all the worried, all the sad, all the sick and tired folks you meet. Some folks say you can't do it in these times. It is all we can do to look out for ourselves. "Look out for Number One!" That is the motto tacked up by the world everywhere. "Scrunch or be scrunched," so they say, isn't in it any more. "Scrunch! —you've got to do it!"

It is not true, though. Under the jacket of many a man beats a heart just as full of love and fellow feeling as that which stirred the little man to dig down for his five cents to help out the man with the lame legs in his time of trouble. We do not find them always because we are not looking for them—we haven't the time. Self is so big it shadows everything else! Got to exalt ourselves, somehow, anyhow! Five cents is too big a price to pay for the happiness of the man who is "down and out."

We find the things we are looking for. They tell a story about John Ruskin that runs like this. In one of the cities across the sea, he looked up to the top of a great cathedral one day and saw what looked to him like a statue of wondrous beauty. The longing came over him to climb up there and get a closer view of the grand work of art. All the way up the winding stairs he toiled till at last he stood close beside the statue. What a sense of disappointment came over him when he saw that the block of marble never had been chiseled out save on the side which faced the street! On the other sides the stone was just in the rough—no beauty, no charms for this man of the tender soul.

What John Ruskin did not see, the eye of Michael Angelo saw in the block of marble which had been selected by a fellow sculptor for a statue, but which he thought he had spoiled by a wrong blow of the mallet and chisel. The stone was thrown away and lay half buried for years and years, till Michael Angelo came upon it and saw the beauty no one else ever had seen. To him it looked as if the marble held wrapped up in it a statue of David, the boy king of Israel. When he began that work, no one ever thought Michael Angelo was much of an artist. But when the lovely statue of King David stood out in all its beauty, the people hailed him the peer of any man who ever had wielded the sculptor's tools. For ages the people of Florence marked time by the day when Michael Angelo's beautiful conception was completed.

All because the sculptor had an eye to see what was in the heart of the marble.

Why do we not look deeper than the poor, sore, lame legs of the neighbor who is in trouble and see the heart beating within? Is it not because we are looking too high?

Do you know how men get a new rose? Pulling the long stalk of an old rose-bush down to the earth, they pin it fast to the ground. Above it they place a little mound of earth and there the stalk lies, warm and moist. The sunshine kisses it. The dews and the rains sift their soft, crystal-pure drops down upon it; the winds touch it lovingly; and by-and-by a miracle is performed. Where the stalk touches the earth, tiny rootlets begin to form. More and more firmly these grapple the ground, until at last the gardener comes and cuts the old stalk off and digs up a new plant.

As long as the rose held its head up high in the air, it would not give birth to another plant of its kind. Only when it stooped down to the very ground did the new life begin.

Give me the man who cares enough for me to look down where I am! It is not enough that he should see through me or over me or around me. I want him to look at me and feel for me because he sees that I need love and good cheer and a kindly word.

How much do you care for the man of the sore heart? Five cents' worth?

Oh, open your heart wide! Let love stream out in generous measure! Give out the very best there is in you, without stint! This is the giving that makes the soul great and sweet and pure!

## God's Care for the Individual

By Orin Edson Crooker

How few of us appreciate God's care for us as individuals or the blessings which He has showered upon us? The average person credits himself with all the good fortune that comes his way and blames God for most, if not all, of the misfortune that befalls him. We seldom stop to take stock of our blessings, but we are always ready to catalogue our afflictions.

Appreciation is usually a matter of contrast. We seldom stop to think of how we have been blessed until some blessing is taken from us. Who realizes what good health means when one has never had it taken from one? Who realizes fully what happiness is until one has first drunk of the bitter cup of unhappiness? And who realizes what death means until it has entered one's own family circle and claimed a member of that circle from our side?

We do not take stock of our blessings because we are so often unconscious of them. Let us once stop and think of how many things God has done for us in order to make life worth the living, and we will be impressed with the thought of God's care and loving kindness. Surely these things are not the result of blind chance. The same power that hung the stars in the heavens, the same Divine Presence that so carefully and considerately fashioned the world for our habitation is still working and caring for us as individuals.

Robert Collyer tells of how he once returned to his old home in Scotland, and of how despondency took possession of his heart when he saw the changes that the years had wrought. He walked here and there through the old haunts which had been his as a boy; he pictured the days gone by; he thought of how fleeting a thing is life; he thought of father and mother, of friends and kindred of long ago, all of whom had passed from mortal sight. A hundred doubts and fears filled his heart and almost overpowered him.

Then he entered a thatched cottage where lived an old man and an old woman, both of them bowed down by years and infirmities. As the three of them sat by the peat fire, the old woman told him a story of infinite pathos, of children dead, of friends departed, and of their own failing strength and resources. But then, with the tears still streaming down her cheeks, she turned from the picture of her sadness and recounted the blessings of God. And verily, these were many and manifest! As he listened to the recital of them, Robert Collyer found the shadow passing away from his own heart, and he said to himself, "Such is the grand and impregnable fastness to which all ages turn—the everlasting and eternal goodness of God."

### How to Get the Patterns

If you want clothes that are right and practical, use Woman's Home Companion patterns, which cost only ten cents each.

They may be ordered from the following addresses: Farm and Fireside, 381 Fourth Avenue, New York City; Springfield, Ohio; 1538 California Street, Denver, Colorado.

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To any Farm and Fireside reader who sends us one new subscription to Farm and Fireside with fifty cents for the same, we will give as a premium for the subscription one Woman's Home Companion pattern. To obtain a pattern without cost, send the subscription to Farm and Fireside, Springfield, Ohio.

# Attractive Clothes for Summer Days

Nos. 1763 and 1764

No. 1769

Nos. 1774 and 1775

Nos. 1741 and 1742

### No. 1763—Bib Waist Bolero

Cut for 34, 36, 38, 40, and 42 inch bust. Material for 36 inch bust, one and one half yards of twenty-two-inch material, with two and five eighths yards of all-over lace and one half yard of velvet

### No. 1764—Three-Piece Skirt for Thin Fabrics

Cut for 24, 26, 28, 30 and 32 inch waist measures. Material for 26 inch waist, six and one half yards of twenty-two-inch material, with one and one eighth yards of all-over lace

### No. 1769—Double-Breasted Wrapper, High or Low Neck

Pattern cut for 32, 34, 36, 38, 40, 42 and 44 inch bust measures. Quantity of material required for medium size, or 36 inch bust, nine and one fourth yards of twenty-seven-inch material, or seven and one fourth yards of thirty-six-inch material. If the flounce is used an additional one and three eighths yards of twenty-seven-inch, or one and one eighth yards of thirty-six-inch, material will be required

### No. 1774—Waist With Large Revers

Cut for 32, 34, 36 and 38 inch bust measures. Material required for medium size, or 36 inch bust, three and one eighth yards of twenty-two-inch bordered material, with three eighths of a yard of lace for yoke

### No. 1775—Skirt Tucked in Groups

Cut for 22, 24, 26, 28, 30 and 32 inch waist measures. Material required for medium size, or 26 inch waist, six and one half yards of twenty-two-inch bordered material

### No. 1741—Peasant Waist With Revers

Cut for 34, 36, 38, 40 and 42 inch bust. Material required for 36 inch bust, one and five eighths yards of thirty-six-inch material, with three eighths of a yard of contrasting material for chemisette

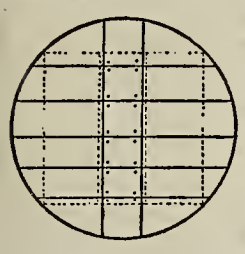
### No. 1742—Flounce Skirt Buttoned in Front

Cut for 24, 26, 28, 30 and 32 inch waist. Material required for 26 inch waist, three and one half yards of thirty-six-inch material

# The Housewife's Club

**To Remodel an Old Dining-Table** Many homes have old-fashioned long dining-tables with oval drop-leaves, which are too good to put away, yet which are the despair of their owners because they are so very old-fashioned.

One housewife has reconstructed her old table so that it can hardly be told from a new one, and this at no expense whatever. She simply removed the drop-leaves, drew out the table-bed and inserted a single straight leaf, which gave her a square table of the same size and shape as the coveted modern ones; while the reserve supply of extension leaves makes a long, oblong table possible when wanted. This change, with an application of dark oak stain to the yellow oak legs, so improved the old table that the owner was as pleased as though she had purchased a new one.



If the still newer round tables are preferred, even this may be accomplished with the expenditure of time and effort, with a very small outlay of money for lumber. For this is needed a piece of board the exact length and thickness of the "false leaves," to which are screwed other boards of suitable length and shape to form a circle. The table-bed is opened and the cross-board set in the place of the usual false leaf; the boards forming the bed of the new round top lying lengthwise across the original table-bed.

This may be screwed to the table-bed or left loose for occasional use, being heavy and firm enough to keep its position.

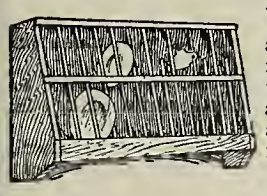
M. E. S. H., Michigan.

**A Good Breakfast-Food** We have our own Graham flour made at the mill. It is much better than that we buy at the store, as it is coarser and contains the whole wheat. It makes a delicious breakfast food and we use it almost the whole year round.

The secret in making smooth Graham mush is this: Do not have the water too hot at first, do not let it boil until you have slowly stirred in two or three handfuls, and do not make it too thick.

Mrs. L. D. H., Oklahoma.

**A Dish-Rack** A rack over the sink, to contain the dishes that are in daily use, is a delightful time-saver. After washing and rinsing, place in position and they will need no wiping. Painted white, the sink has a very neat appearance. The dimensions of the one we use, for a moderate-sized family, are as follows: Three feet long, two feet six inches high, nine inches deep at bottom, four inches deep at top, six and one half inches for the upper shelf for cups and saucers, ten and one half inches for the lower shelf for plates. L. A. N., Oregon.



**Cure for Earache** Gather green hoarhound leaves; steep in half a pint of water until it looks pretty dark. Pour it into a cup, tie a cloth over the cup, and hold the ear to the cup for ten minutes. One application is generally sufficient. This is a never-failing remedy.

Mrs. S. A. B., New Mexico.

**Cream-of-Tomato Soup** Rub one small can of tomatoes through a colander. Season with salt, pepper, one teaspoonful of sugar and let boil thoroughly. Make a thickening of one tablespoonful of flour and one half pint of milk; add slowly to the boiling tomatoes, stirring all the time; let boil up good, then gradually add one quart of cold milk. Bring to a boil again, add a lump of butter, and it is ready to serve. Use only fresh milk, as older milk will curdle. Mrs. L. D. H., Oklahoma.

**Apple-Catchup** This can be made most any time during the year. Pare, quarter and core enough sour apples to make one quart of apple-sauce. To this add two medium-sized onions chopped fine, one quart of vinegar, one cupful of sugar (maple is nice to use), one teaspoonful each of mustard, cloves, pepper and salt, and two tablespoonfuls of cinnamon. Boil one hour; seal while hot. You will find this even better than tomato-catchup. At least, we think it is. Mrs. H. C. M., Vermont.

**A Drying-Frame** My husband made a drying-frame for me that I wouldn't take a lot of money for. On a light wooden frame, seven by four and one half feet and three feet high, he stretched light woven wire. He used a fence-wire, but heavy chicken-netting would do. The frame is light, and I can move it about

myself. On this I spread out apples to dry, air my feather-bed, my mattresses, dampen my wash-clothes before I take them in the house, beat carpets and air rugs. H. C., Missouri.

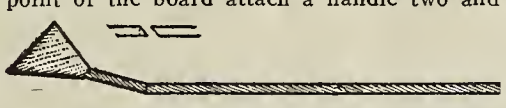
**Nice Way to Cook Dried Peaches** Soak the peaches ten minutes. After which wash them thoroughly and let soak again twenty hours. Put them on the stove and let them come to a boil; remove, drain off all the juice and return juice to the stove with a cupful of sugar. Remove the skin from the peaches and, after the juice has formed a syrup, drop the peaches into the juice and cook until tender.

Mrs. G. T. D., Texas.

**Molasses-Cake** One cupful of sugar, one half cupful of lard, one teaspoonful of cinnamon, one teaspoonful of cloves, one cupful of raisins, one cupful of currants, one cupful of molasses, one cupful of boiling water in which a level teaspoonful of soda has been dissolved, three cupfuls of flour and a pinch of salt. Beat well, then add three eggs well beaten. Beat again. This cake can be made without the raisins and currants, and quite often I omit the eggs and have success.

Mrs. T. A., Idaho.

**Window-Cleaner** By using one of these improvised window-cleaners, one may clean the outside of the upper part of a window from the inside of the house. Take a wedge-shaped thin board about four inches wide at the top, and at the point of the board attach a handle two and



one fourth feet long. Pad the board, and you will be able to wash and polish your windows from the inside.

A straight handle is not so easy to clean with as one that is crooked a little. To get the bend in the handle, as shown in the illustration, cut off the handle at a slight angle and reverse one of the pieces, then nail together. Mrs. H. H., Colorado.

**To Make Paste for Home Use** Mix gradually and thoroughly one pint of cold water and one tablespoonful of flour. Let it come to a boil, stirring continually. Keep boiling until it becomes thin, then add one teaspoonful of nitromuriatic acid. Boil until it thickens, when it is ready for use.

This paste is cheap, harmless, and will keep in perfect condition for an indefinite length of time. L. B. R., New York.

**Corn-Chowder** One can of corn, six or eight medium-sized potatoes sliced thin, one small onion, one pint of milk, salt and pepper to taste. Fry three slices of pork which have been cut into small dice, remove from fat and set aside to add to chowder when it is ready to serve. Put the fat into a kettle and the vegetables in alternate layers of potato, corn, etc., and add sufficient water to cover. Cook twenty minutes, stirring occasionally. Add milk and diced pork and boil up once. Place split crackers in a large tureen and pour hot chowder over it and serve at once. This makes a good, nourishing dinner or is nice for supper. Mrs. F. W. F., New Hampshire.

**Household Help** A teaspoonful of borax added to the last water in which clothes are rinsed will whiten them surprisingly. Pound the borax so that it will dissolve easily. This is a splendid way to whiten clothes yellowed by age.

Mrs. H. H., Colorado.

**A Wash-Day Hint** On wash-day, instead of stooping every time a clothes-pin is needed, try this simple plan. Put one end of a wire hook on the clothes-line and the other end through the handle

of a basket. In this way the basket can be slid along as you hang up the clothes, and you will not be obliged to do any stooping.

Mrs. F. G., Illinois.

**Egg-Cutlets** Chop four hard-boiled eggs fine and add a sauce made of one cupful of milk, one heaping tablespoonful of butter, two tablespoonfuls of flour, one even teaspoonful of salt, a pinch of pepper and a little chopped parsley. When quite cold, form into cutlets, dip in egg and roll on bread-crumbs. Cook in hot fat like doughnuts.

Mrs. J. H. R., Ohio.

**To Set Out Evergreen Trees** In setting out evergreen trees in spring, many are unsuccessful with them. The trees have very fine roots, and instead of crowding them into a small hole, a large hole must be dug. Into the bottom of this pour a bucketful of water and then spread out the roots so that they will be in their natural position. Then cover well.

If the weather is dry, the trees should be watered twice a week, and one must be especially careful to see that the water reaches the roots. These fine roots dry out very quickly, and the trees will die in dry weather unless well established, so throughout the first summer they must be supplied with sufficient moisture. Mulching the ground around the tree will help retain the moisture. L. J., Kentucky.

**To Use a Cracked Vase** To utilize a vase which leaks only a little, pour a small quantity of melted paraffin within, and let it harden over the crack. The vase will then hold water perfectly, and if the paraffin is removed by the scratching of flower-stems or by washing the vase, it can be easily renewed. E. L., Wyoming.

**For Those Who Crochet** When crocheting, I have always been bothered with my spool of thread falling from my lap to the floor. I find that a small pocket in my apron, with on eyelet-hole for the thread to run through, keeps the spool in place and saves much time and annoyance.

Mrs. W. E. D., New York.

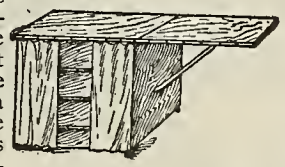
**Starch That Won't Stick** To make starch that will not stick to the irons and spot the clothes, use one teaspoonful of granulated sugar, one half teaspoonful of lard, and shave a little white soap (toilet-soap is best) into the boiling water. Cook thoroughly. Half-cooked starch often sticks to iron and spoils the clothes.

L. J., Kentucky.

**Concerning Stair Carpets** When purchasing stair carpet, buy a yard or two more than is required, and fold it in at the top and bottom of stairway so that the carpet may be shifted higher or lower to equalize the wear. Otherwise, the carpet will wear through at the edges of the steps and the other part be still good.

Mrs. J. L. R., Ohio.

**Convenient Work-Table** This table was devised from a dry-goods box cut down to a suitable size. Shelves were inserted and an extension leaf was hinged on to the top, thirty inches long and as wide as the top of the table. This was fitted with a brace which supported it when in use, the brace fitting into a slot near the base of the table, as shown in the illustration. It was painted, a curtain hung in front and a tape-measure tacked, with brass-headed tacks, along the front edge. The cost was trifling, and the table is a very handy adjunct to the sewing-room.



H. T., New York.

**Excellent Vinegar** Boil six pints of corn or barley all day, to extract the strength from grain. Strain liquid in suitable keg, add enough water to make six gallons in all. Dissolve in it six cupfuls of brown sugar and two cupfuls of molasses. When you wish to fill the keg again, leave about a gallon of vinegar in it, which will cause the vinegar to work quicker.

Mrs. M. F. B., Colorado.

**To Soften Bread-Crust** If you happen to let your bread bake too long or the oven is too hot, thus making the crust very hard, spread the top of each loaf with butter as soon as removed from pan and cover all with a cloth. This will make the crust soft and delicious.

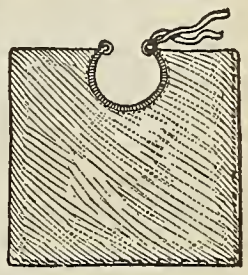
A. L. McG., Kansas.

**To Keep Yeast-Cake Fresh** A yeast-cake may be kept for a week if it is tucked snugly down into the flour in the barrel or bag, where it is out of reach of cold, heat or moisture.

Mrs. C. E. W., New Hampshire.

**Bran-Bread** One and one half cupfuls of sour milk, one half cupful of molasses, two cupfuls of bran-flour, one cupful of wheat-flour, one teaspoonful of soda, one teaspoonful of salt. Bake slowly one and one half hours. This makes one loaf. Mrs. M. G., New York.

**Inexpensive Home-Made Bib** I find that bleached flour-sacks make satisfactory bibs for children. Fold the sack twice to make it four thicknesses, cut out the neck and bind. At each end sew a small brass ring; tie a piece of tape through one ring, so that the ends can be tied when the bib is on. There are no buttonholes to work and no buttons to break when the bib is put through the clothes-wringer. The brass rings serve well as hangers, which make it easy for the small child to hang up its own bib.



Mrs. C. H. M., Oklahoma.

**Fruit-Cream Pie** One cupful of sour cream, one cupful of sugar, two teaspoonfuls of corn-starch, one half cupful of chopped raisins, the yolks of two eggs, one teaspoonful of cinnamon, one half teaspoonful of cloves. Bake and make meringue of whites of eggs for top, then brown. Mrs. M. J. H., New York.

**Caramel Apples** Pare and core tart apples, and cook slowly in a well-covered dish until tender, with a little water and sugar. When well done, but still whole, remove carefully to a dish. To the remaining syrup, which should be about a cupful, add a cupful of brown sugar, one-third cupful of cream, a tablespoonful of butter and a few chopped nuts. Boil until quite thick, and pour hot over the apples. Serve cold, either plain or with whipped cream. Mrs. G. L. S., New York.

**Cocoanut Cake** Cream together one tablespoonful of unmelted butter and one and one half cupfuls of sugar; one egg and yolk of another; salt; one cupful of milk; one teaspoonful of vanilla, and two teaspoonfuls of baking-powder sifted with two cupfuls of flour. Bake in two layers.

*Icing:* Boil one cupful of sugar and one fourth cupful of water until it spins a thread. Pour very slowly over beaten white of egg. Flavor with vanilla. Spread on cake, then sprinkle with cocoanut. This cake is delicious, yet inexpensive.

Mrs. A. M. A., New York.

**Churning Hint** When churning, if the butter refuses to gather, dissolve a tablespoonful of baking-soda in a pint of cold water and add; then churn a moment and your butter will be gathered nicely. Mrs. B. W. S., Missouri.

**Cider-Sauce** This sauce is especially good served over Graham pudding. Mix thoroughly one half cupful of sugar, one tablespoonful of flour and a large tablespoonful of butter. Add one cupful of boiling water and one cupful of thick boiled cider. Cook until clear and flavor with lemon. Mrs. I. L., Michigan.

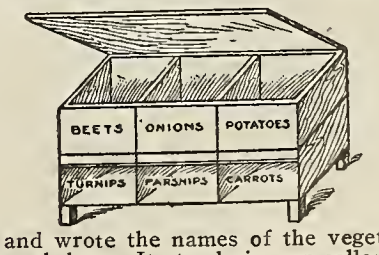
**For Swollen Glands** This recipe was given me by a physician. When the glands of the throat or neck become swollen from tonsilitis or cold, mix enough tincture of iodine into hog's lard to turn the lard a deep golden yellow. Apply to the outside of the throat several times a day.

M. L. G., Kentucky.

**Two Good Suggestions** All the children in our family are hard on their shoes and generally have to have them tapped once or twice before the uppers are gone. A friend told me she applied a couple of coats of copal varnish to the soles of her children's shoes and they never needed tapping. I tried it and find it one of the best economies of our household.

I have found the following method a great economizer of time: On ironing-day I place the clothes in two piles. Those that need mending I put by themselves on one side of the clothes-horse, and the rest by themselves. When the ironing is finished, I can put away those not requiring any mending without having to sort the whole pile over. M. B. G., Wisconsin.

**A Handy Vegetable-Chest** This vegetable-chest is made of three store-boxes placed side by side and nailed together. I made a cover of a planed board and attached it with hinges to the box, put blocks on the corners and had an excellent bin, into which rats have never penetrated. I presume drawers could be made, but I contented myself with keeping two kinds of vegetables in each box, separating them with a piece of board. I painted the bin a dull




gray and wrote the names of the vegetables upon each box. It stands in our cellar, and in the winter we throw a blanket over it, to keep the contents from being frost-bitten.

S. C. P., Massachusetts.

Editor's Note—Monthly we give prizes of $2.00 for the two best descriptions (with rough sketch) of original home-made household conveniences or labor-saving devices, and $1.00 for the third best or any that can be used. We also give 25 cents each for helpful kitchen hints and suggestions, also good tested recipes that can be used. We would suggest that you do not send more than two recipes, and not more than five kitchen hints each month, because we receive so many that space will not allow us to print them all, in spite of the fact that they are reliable and practical. All copy must be in by the tenth of June, and must be written in ink, on one side of the paper. Manuscripts should contain not more than 250 words. We would suggest that contributors retain duplicate copy, as no manuscripts will be returned. The mail is so heavy that it is impossible for us to acknowledge receipt of manuscripts. Address "The Housewife's Club," care of Farm and Fireside, Springfield, Ohio.

# OUR YOUNG FOLKS' DEPARTMENT

# How Their Names Were Changed

## A Story for Little People—By E. M. Murray

### Illustrated by Laetitia Herr

And so, my kiddies, you would like to hear more about those queer little children, "Didn't-Mean-To" and "Don't-Want-To," who lived long ago in the once-upon-a-time days?

I find there are a good many things that might be told about them, but I think I shall tell you what you will like best to hear, how their names were changed. Ah! I thought you would draw your chairs nearer for that, for, of course, you were as sorry that Susie and Tommy should have had such disagreeable names as if you had had them yourselves. That's one of the nice things about living to-day, my kiddies—we have learned to sympathize with other people. There! I knew I'd do it—another big word dropped right down in the midst of you. I saw Jacky jump when that word plumped up against his ear-drum so suddenly. But it is such a pretty word that I just couldn't help using it. It means to be sorry *with* other people. Now isn't that lovely? You know, when we are sorry, we are apt to feel that we are all alone and that nobody loves us; the world seems very dark and cold, when, lo, mother or some friend comes along and is sorry with us, and soon the world seems bright, we are happy inside of us, and everything is all lovely again.

Doesn't that make "sym-pa-thize" a lovely word, a comfortable word, and aren't you glad I said it? I am. I am always so much happier myself, after I have sym-pa-thized with somebody. You try it the next time you have a chance, and I am sure you will like it, too.

But to go back to Susie and Tommy, with their sad names, "Didn't-Mean-To" and "Don't-Want-To," and the poor widow who was also their mother. The two children were nearly a year older than when they quarreled over a spoon, upset the milk and spoiled their luncheon, but they had not mended their ways very much. Susie still did in-con-sid-er-ate things, and Tommy was still selfish.

One beautiful cold winter morning they woke up quite early, before the poor widow had called them. When Susie looked out and saw how cold it was, she cried out to Tommy, "Hurry up, brother, and we will make a slide."

As they were still quite little children, the poor widow did not like them to go far away from the house to slide on the big pond, so when the day was so cold that Jack Frost nipped everything that was out of doors, the poor widow used to pour some water on the stone walk in the back yard, and very soon the children had a lovely slide.

Susie and Tommy dressed quickly that cold morning, and hurried down-stairs. They wanted the poor widow to stop her work and make the slide for them at once, but she could not, so she asked them to be patient and wait half an hour. "You are up so early," said she, "that you will have a long time to slide after the water freezes."

But Tommy began to whimper.

"I don't want to wait," said he.

"Oh, mother," cried Susie, "let me make the slide. I am big enough now."

"I am afraid you will spill the water, my dear; then we should have ice in the wrong place and somebody might fall and get hurt. You had better wait."

"Oh, no, mother," answered Susie. "I won't spill any water until I get to the stone walk. It will be great fun to have it all ready when we have eaten our breakfast."

With this Susie began to fill the big water-pail at the sink, and very soon she and Tommy were carrying it out. They were so eager and the pail was so heavy that they spilled some water on the back steps. When Susie saw this, she said to Tommy, "Please take the old broom and brush the water off the steps while I am making the slide."

"Don't want to," growled Tommy, so he went down the walk to the little sunken place where they were to make the slide. Jack Frost took hold of that water at once, and, in a minute or two, he made it into shiny, slippery ice, just before the water got all the way over the edge of the step.

By this time the poor widow had the children's breakfast ready and went to the back door to call them in. What was her horror to find that they were out in the cold without either hat or coat on. She started to run down the steps, but her foot slipped on the shiny ice, and she fell headlong. When she tried to rise, she could not, so she sent Susie to call a neighbor. Two neighbors ran quickly, and when they had carried the poor widow into the house, they found she had broken her ankle. So one of them hastened for the doctor while the other stayed with the frightened children and the poor widow.

"I didn't mean to, mother; indeed, I didn't mean to," sobbed Susie, who in her heart loved her mother dearly.

"I am sure you did not, my dear," answered the poor widow kindly, for poor widows who are also mothers cannot bear to see their children suffer.

"He cuddled up to her and said, 'I'm sorry, mother, that I didn't want to'"

"I am tired of hearing you say that," said the neighbor. "It may be true that you didn't mean to do such naughty things, but it is clear to me that you don't mean *not* to, and that's where the trouble lies."

Now, Susie, as I told you before, was really a very nice, bright child, and this remark of the neighbor set her to thinking. She stopped her crying that she might think better, for it is a strange thing that we cannot think very well, my kiddies, while we are crying and sobbing.

After a while the neighbor left the room, and Susie crept close to the poor widow as she lay on the couch, and said, "I am very sorry, mother, that I didn't mean *not* to, and I'm going to try to mean *not* to, right away."

Then the poor widow was glad in spite of her pain, and she ut her arms around Susie and kissed her.

Tommy had been thinking some, too. He began to remember how many things the poor widow had always done for him, and then he felt ashamed to think she would not have broken her ankle if he had only brushed off the water when Susie asked him. He was only a little fellow, so he could not say what he felt as Susie could, but he, too, loved the poor widow dearly, so he cuddled up to her and said, "I'm sorry, mother, that I didn't want to." The poor widow understood him, as poor widows who are also mothers always do, so she said very kindly, "Mother's little man will try to want to, won't he?" It made Tommy happy to find that the poor widow knew what he meant, so he cuddled still closer and patted her pale cheek.

If you never had a broken ankle, my kiddies, you cannot begin to think how long it sometimes takes for the bone to mend. The poor widow could not walk for fourteen long weeks, and all that time Susie and Tommy kept their promise. After that they were obedient children and were no longer called "Don't-Want-To" and "Didn't-Mean-To."

## The Runaway Leaves

### By Dorla M. Albright, Age Thirteen

Once upon a time there was an old tree with many little leaves. The mortals called this tree an oak, and the little leaves oak-leaves.

One night, Jack Frost came and froze the leaves. They began to turn many beautiful colors, red and yellow and brown. And at last they fell to the ground, rolling and hopping merrily around.

"Be careful," said Mother Oak, "and do not go far with the Wind, because he will not let you come back, and you'll never see home again."

"Oh, we can get back all right, we are strong," said the leaves, and so, when Mr. Wind came along, they jumped and ran along with him.

When Farmer Brown saw so many leaves blowing around, he was pleased, because he used the leaves to cover his lawn and flowers.

He said to his children, "Now, children, go out in the barn-yard and rake up the leaves. The oak-leaves are falling fast."

So the children went out and raked up the leaves. The leaves tried to jump away, but the children put them in strong bags and carried them into the barn.

"Oh, dear," cried the leaves, "if we had only obeyed Mother Oak we would be all right."

But when winter came, the children took the sacks out of the barn and dumped the leaves on the lawn, and when spring came, they raked them up and put them in the garden to make the vegetables grow.

"Maybe it is just as well that we left Mother Oak and let the Wind take us," said the little leaves, "for just see how beautifully we are making the garden grow."

## Cousin Sally's Letter

Dear Girls and Boys:—

Just three years ago to-day I first introduced myself to you, and I can remember so clearly the little flutter in my heart when I wrote my first letter to you. You see, I was so eager to win your love and trust, and wanted, so keenly, to have you feel that I was your friend and "club" cousin.

When Uncle Sam brought that first copy of Farm and Fireside bearing my little message to you, I waited here in my office anxiously to see how you would greet me. But, gracious me! I didn't wait long, for the letters began to pour in and pile up on my desk. Now at the end of three years we are very good friends, indeed. It doesn't seem as though I had known you and had your friendship for only three years. Somehow, we seem like older friends, don't we? You have all helped me so much to make our department a success, and I thank you most heartily for your coöperation.

And a special word of thanks to our club members for their enthusiastic letters and good words concerning the club, and for their willingness to help our work along.

I want every boy and girl who reads this page to become a member of Cousin Sally's Club. And to be a full-fledged member you *must* have a C. S. C. button. Thousands of girls and boys all over the country are writing me: "Be sure to enroll me, Cousin Sally, and send me a button *right away*." I have been sending the buttons out just as fast as I could tuck them into envelopes. Here is yours all ready and waiting for you. Just tell me that you want to be a member, and send me five cents to pay for the cost of sending you the button. There are secrets in the club of which I dare not breathe a word until you are a member. So hurry along!

And now a word to our new readers, who are just beginning, perhaps, to take an interest in our corner. I am always ready to welcome you into our happy circle, so write me whenever you care to. I shall always be glad to have your letters.

It is not necessary to be a subscriber to join our club. If you read our page and are interested, that is enough.

Before I say good-by I want to ask you all to take part in our contest this month. The prizes are certainly worth while working for, and I shall be very happy to have a large response this time. There is no excuse for you very young readers not to take part, for I have given you a special contest. And don't you think the prizes are unusually attractive this time? I want this to be the biggest contest we have ever had, and I shall be disappointed if it is not. Ever faithfully,

Cousin Sally

## Monthly Prize Contest

In honor of our third anniversary, this month we are going to offer two Brownie Cameras (No. 1) to the boy and girl who sends me the best copy of the picture shown above. And for the next best four drawings we will give beautifully illustrated books.

### Rules for Entering Contest

1. Your drawing must be considerably larger than the original picture on this page.
2. Do your drawing in ink or pencil.
3. When mailing it, do not roll it, but send it flat.
4. Your drawing must be signed by parent or guardian, to certify that it is *your own* work, or it will not be considered in the contest.
5. Write your name, age and address on the back of your drawing.
6. If you join the club at the same time you enter the contest, write your name, age and address on a separate sheet of paper.
7. The contest closes May 31st.

Address Cousin Sally, Farm and Fireside, 381 Fourth Avenue, New York.

### For Readers Under Eleven

I want you younger readers to color the picture given above with crayons or water-colors. For the six best colored pictures we will give prizes of games, paper dolls or a set of twelve post-cards showing views of New York City.

Be sure to follow above rules for entering the contest, with the exception of the first three, which do not apply to you.

## The Letter-Box

Dear Cousin Sally:—

I've just been helping mama in the garden. It is very nice. We have onions, English peas, mustard and lettuce planted in it.

A little bluebird has a nest in a post near our garden. A mocking-bird is building a nest in the rose-bush in front of the house. Our violets are very pretty now.

We have a dog named Prince and three cats, Blacky, Jim and Diana.

I think our page is nice, only I wish we had more room for our work.

Our school closed the seventh of April.

I would like to correspond with some of the cousins. Your loving cousin,

Grace O. Smith, Age Fourteen,
R. F. D. 1, Box 61, Benton, Louisiana.

Dear Cousin Sally:—

You can't imagine how happy I was when I received your letter and the pin. I think it is a beauty. I am going to try very hard to live up to the club motto.

Perhaps you would like to hear about my little pet calf. She is a dear little thing. I call her Nancy. She is of a yellowish-red color. Every time I go near her, she takes hold of my dress and pulls it. There was never a dearer calf in our barn than Nancy.

I live on a farm and have two sisters and one brother, who is married. We keep fifteen cows, ten calves, four pigs, about forty hens, one horse and a pair of cattle.

I am much interested in birds, and hope some day to be an ornithologist.

Now, I will close for this time, thanking you very much for the pin. Your cousin,

Bessie V. Chamberlain, Age Twelve,
R. F. D. 1, Terryville, Connecticut.

Dear Cousin Sally:—

I will write and tell you how very much I like our page. I think the stories are just fine.

I correspond with about one hundred of the cousins.

I am going to get a lot of my school-mates to join C. S. C.

I go to school and am in the eighth grade. Our school closed April 10th.

Wishing the club much success, I remain,
Your loving cousin, Mae Sheesley.
R. F. D. 2, Big Run, Pennsylvania.

Here are a few names from some of the cousins who are anxious to exchange post-cards with any of our young readers:

Helen Forgan, age fifteen, 2517 Eighth Avenue, Beaver Falls, Pennsylvania.

Barbara Mae Root, R. R. 1, Brooklyn, Wisconsin.

Helen M. Funk, age twelve, R. R. 2, Belle Centre, Ohio.

Ruth Scarff, age twelve, Sharon, Maryland.

Edith Wersler, age eleven, R. R. 2, Casstown, Ohio.

Willie (age thirteen) and Lulu Remely (age fifteen), Qualey, Ohio. (Views preferred.)

Nelle Luckwell, age fourteen, Qualey, Ohio.

# The Housewife's Letter-Box

## Do You Need Help?

Have you been looking for a special recipe for years? Do you need any information on household matters? And do you meet with little problems in the home that you wish someone would solve for you—someone who has had a little more experience than you? Then, why not make use of YOUR OWN department and ask the questions which have been troubling you? This department has proved that the spirit of helpfulness is abroad in the land, especially among the women of the farm. That our readers have the mutual desire to help one another is evidenced by the large and prompt response we have had to the questions which are printed here monthly. There is no payment made for contributions to these columns. All answers and inquiries should be addressed to "The Housewife's Letter-Box," care of Farm and Fireside, Springfield, Ohio.

If an immediate answer is desired, it will be sent, provided a two-cent stamp is inclosed.

## Questions Asked

*Will someone please tell me—*

How to make the tumbling-block quilt-pattern and how to put it together?
Mrs. J. W. C., Oregon.

How to make a pewter plate bright?
Mrs. N. D. B., Michigan.

A recipe for making toilet-soap?
Mrs. I. J. F., Pennsylvania.

How to remove silver nitrate stains from white cloth? Mrs. L. W., New York.

How to make mucilage for home use?
Mrs. T. M. H., Kansas.

A good recipe for ginger-cookies?
J. V. S., Pennsylvania.

How to cook grape-fruit?
Mrs. C. E. M., Connecticut.

A good and cheap way to varnish or stain a floor around an art square?
Mrs. O. S., Ohio.

How to remove fly-specks from lacquered brass? Mrs. E. B. C., California.

Mrs. W. C., of New York, would be ever so glad to have Mrs. T. B., of California, tell her how she makes her bread from yeast requiring no starter. The recipe was printed in our paper, June 10, 1910.

## Questions Answered

*For L. M., of Washington*—Your question was referred to one of our poultry experts of our editorial staff, and below is his answer, which I am sure will prove helpful to you.
Housewife Editor.

Ducks may be picked as soon as warm, settled weather arrives, say early in June in central latitudes, and earlier farther South. Two pickings may be safely made during the season, but the feathers should become fully developed before the second picking is made. By pulling a few feathers on the breast, their ripeness may be determined. If the base of the feathers is white, they may be safely picked, but if they show any blood, it will not be advisable to pick them until they are riper.

The ducks must not be picked during the period when they are laying or when eggs are expected or desired.

Below is the article, "Making Perfumery at Home," contributed by W. K., of Canada, which will no doubt be of great interest to our readers who requested directions for extracting oil from peppermint.
Housewife Editor.

The manufacture of perfumery has always seemed a difficult process to many, and without doubt the blending of certain kinds of perfumes is a matter of much scientific and skilful manipulation; but, on the other hand, the most commonly used perfumes can be made at home with simple apparatus and without much expense or trouble, says A. S. Atkinson in the Scientific American. In many parts of the country, flowers are so abundant that one can harvest all that are needed for manufacturing at home perfumes enough for a year's use.

A perfume-garden should prove as profitable as one of fruits or vegetables. We plant gardens for cut flowers and for flower-seeds, but few raise flowers for perfume-making. If one has the garden space, it is well worth trying a hand at making perfumes at home.

One must devote time to the cultivation of certain flowers, which thrive luxuriantly in the vicinity. In many parts of the country roses thrive so luxuriantly that fields can be sown with them, and an abundant crop raised. In other sections the rose is too slow-growing for this purpose, but the violet takes its place. Again, it must be the jasmine, the tuberose, the orange-blossom, or lavender. Whatever flower it is that thrives and possesses delicate, but powerful, fragrance should be chosen for the work.

### How to Make a Still

Direct distillation is the most satisfactory way of making perfumery. The still is a simple affair, and it can be made out of articles found in the average home. Take an ordinary tin oil-can, scour it and purify it of all oil odors. Stop the spout completely and fit a cork in the top, through which the oil is poured. From a hardware-store get four feet of copper tubing (tin or galvanized iron pipe may also be used). The tube should be bent downward at the ends.

The tin can should be filled with a pound of flower-petals gathered fresh in the early morning. Pour over these petals eight fluid ounces of alcohol. Then put the can in a saucepan half filled with water, and place on a stove, where the water can be kept at the boiling-point. A hole should be cut through the cork of the can just large enough to receive the metal tube. Place a quart jar on a table near by, and insert in it the other end of the tubing. This jar should not be sealed, or distillation will not go on properly.

When the water boils, the alcohol in the can is heated, and this process extracts the perfume from the flower-petals, and gradually causes distillation through the tube into the cold jar on the table. The alcohol thus distilled will carry with it the true attar of the flowers. Alcohol has a peculiar property for extracting and holding the scent of flowers. As fast as distillation goes on the contents of the jar should be emptied into glass bottles and securely corked and sealed with paraffin. In blending perfumes of several flowers, do the mixing after each one has been distilled separately. Do not mix the flowers in one still.

### How to Extract Oil

Another method of using this still is to employ water instead of alcohol for distillation. Instead of attar, we get the essential oil of the flowers, and this rises and floats on the surface of the water in small globules, which must be skimmed off carefully, and immediately bottled and kept cool and air-tight. When sufficient oil is obtained, it should be mixed with alcohol to retain the odor indefinitely. One may distill with water any number of kinds of flowers, and with the essential oil properly bottled, blended perfumes can then be made. A few drops of several kinds of oil are poured into a bottle containing a certain amount of alcohol, and, when shaken thoroughly, one has a delicious fragrance for home use. For instance, eau de cologne is made by pouring into a glass bottle a pint of alcohol, and adding half a dram of home-made attar of rosemary and twenty drops each of the attar of orange-peel, lemon-peel and bergamot-peel. The distillation of these fruit peels is another desirable home industry. Cut up fresh orange or lemon peel and place it in water in the tin can, and heat as for use in flower-leaves. The essential oil of these peels will then be gradually distilled into the other receptacle. Skim off the globules, and confine in corked bottles.

### Extracting Perfume From Delicate Flowers

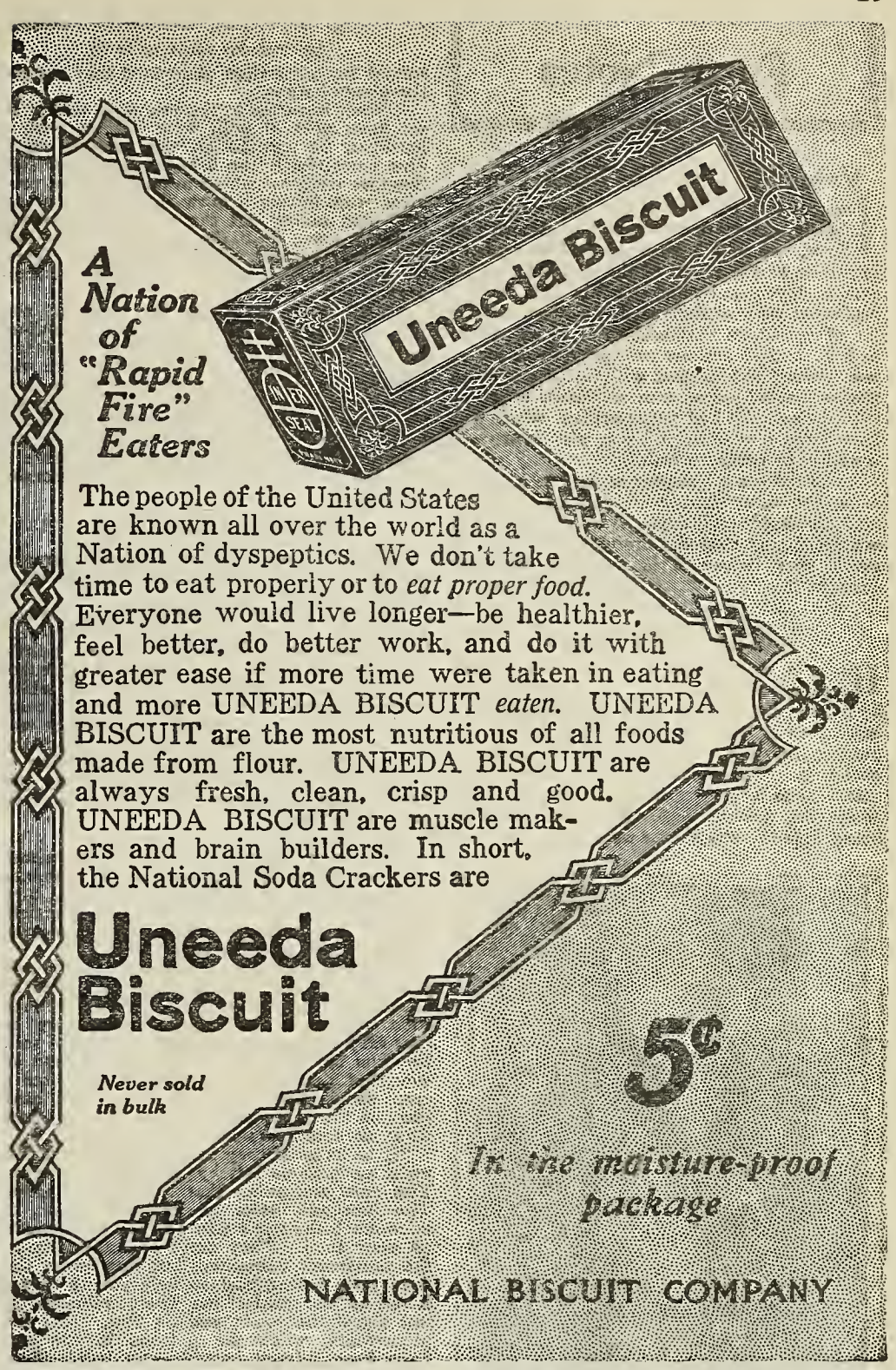
Besides distillation, we have the process of absorption, which anyone can do at home with little trouble and expense. It is slightly more complicated, but it will extract the perfume of more delicate flowers, such as the violets, with greater success. This process consists of covering two large shallow pans or soup-plates with a layer of melted suet. The layer should be half an inch or more thick. When the fat has hardened, gather the violets, jasmine or tuberose flowers, and cover the suet thickly with them. Then place one plate over the other and force down firmly. Wrap the plates tightly in paper, so that the perfume will all be retained. In twenty-four hours the suet will have absorbed nearly all the perfume. Then quickly remove the dead petals and replace with more fresh ones. Repeat this operation for several days or even for a week, so as to secure a strong supply of odors. When enough petals have been robbed of their odor, remove the top plate and cut the suet into small pieces, and drop them into a wide-mouthed bottle or glass jar containing alcohol. The transference should be made as quickly as possible and with least exposure to the air. Then close the bottle or jar, and seal with paraffin to make air-tight. As the suet absorbed the fragrance of the petals, so will the alcohol rob the suet of its concentrated extract. Every day the bottle should be shaken a little, and in a fortnight the alcohol should be poured off through a strainer into bottles and corked.

### To Make Rose-Paste and Sachet-Powder

Besides making the liquid perfumes, one should consider sachet-powders and perfumed pastes. These have their use in every household. A rose-paste is made by steeping rose-leaves in water and pounding with a mortar until reduced to a paste. This maceration should be thorough and can be done with an ordinary rolling-pin. Now add a drop or two of your home-made attar of roses and permit the paste to dry in an air-tight receptacle. The paste will grow quite hard, and can then be cut into any shape desired. A piece placed in a drawer will scent the place for a long time. If the pieces not in use are kept air-tight, they will retain fragrance indefinitely and will always be ready for instant use. Laid in linen and clothes-presses, they add that subtle fragrance to the fabrics which so many like.

One may compound sachet-powders out of flower-petals, spices and perfumes to suit individual preferences. The art of making sachets is very simple and inexpensive. If we add to these attars and essential oils such simple articles, purchasable at any drug-store, as iris-root, musk, and cochineal (the last for coloring only), and such spices as cloves, cinnamon and ginger, we have all the materials that a small laboratory requires for making a dozen kinds of popular sachets.

Lavender-seeds raised and cured at home make an unusually pleasing sachet for those who like this odor. Another is manufactured by mixing iris-root and ground cloves with a little musk and attar of roses, the whole moistened with a little alcohol, and then rolled and kneaded into a paste, which in time grows quite stiff.


# Get a Watch and Fob
## Without Cost

**Boys:** **Here is a chance** to obtain a handsome and useful watch, and a fine leather fob with a gilt metal charm engraved with **your own initial letter** without cost. Farm and Fireside guarantees you satisfaction.

**DESCRIPTION:** This watch has a handsome nickel case, with open face. It is a stem-wind and a stem-set, just like other high-priced watches. It has a close-fitted snap back. It is only ⅜ inch in thickness. It is a perfect timekeeper, tested and regulated before leaving the factory. It is engraved front and back, and is a watch of which anyone would be proud.

**The Fob** is of handsome black leather with a polished buckle, like illustration, with a rich gilt charm engraved with **your own initial.**

**MOVEMENT:** Regular 16 size. Lantern pinion (smallest made). American lever escapement, polished spring. Weight, complete, with case, 3 ounces. Quick train, 240 beats to the minute. Short wind, runs 30 to 36 hours with one winding.

Every watch is fully guaranteed by the manufacturers and by Farmand Fireside.

The manufacturers will make all repairs for a year free, as explained on the guarantee.

## How to Get the Watch

You can get this dandy watch and fob very easily. Write a postal-card to the Watch Man. Tell him you want to get this watch and fob without spending one penny. He will be glad to help you get your watch. This is a chance you must not overlook.

Thousands of delighted boys have secured their watches this way with the help of the Watch Man. You can do it, too. Any boy that really wants one can easily get this fine watch. But how will the Watch Man know about you if you don't tell him?

**Write a Postal To-Day to THE WATCH MAN**

**FARM AND FIRESIDE, Springfield, Ohio**

# Farm Notes

## Valuable Use for Flint Corn

I found last year, as I find most any year, that it matters not how good seed-corn you plant, you will have more or less replanting to do as the result of the depredations of crows, doves and chickens. If the field is replanted with similar seed, we often have a lot of soft corn that will spoil if we try to crib it, and sometimes we get only a lot of weak-kneed fodder that will fall down when the first wind-storm comes. Well, to avoid this, do as I did last year; replant with good long-eared flint corn and you will have good sound corn ready to crib.

I planted some last year as late as a month after the other had been planted, and yet all was hard and dry. And if you have coarse ground that the drought catches most every year before it is matured, try flint corn on it. Sherman Sloter.

## "United We Stand"

Here is a photograph of a curious tree growth, showing two sugar-trees united by a limb, which they have in common. The large tree is two feet in diameter below the uniting limb and fourteen inches in diameter above it. The limb itself is nine inches thick. The large tree is about one half dead above the uniting limb, the cause doubtless being that the small tree takes the sap from

the large tree. This makes the small tree larger above the limb than below. These curious trees are located in Cambria County, Pennsylvania. Daniel G. Foust.

A whirlwind start sometimes goes before a dead calm finish, but, nevertheless, do all your work with a vim.

Blue-grass, alsike clover and white clover for limestone soils, and red-top, alsike and white clover for non-limestone soils make good combinations for pasture.

Whack all of those bunches of weeds out of the meadow while they are small, easily cut, and contain no weed-seeds for next season's crop. It will not only improve the quality of the hay, but will work toward establishing a stronger sod of grass.

## Better Than Scarecrows

A Michigan reader asks how he can prevent crows from pulling corn after it appears above the ground.

Take the seed-corn well cleaned of all chaff and dust. Place it in the sun, spread where it will get thoroughly warm, and then for each peck of seed-corn use a teaspoonful of tar, placing the corn in a large vessel so that it can be thoroughly stirred while it is warm. By this means the tar will be evenly distributed over the surface of all the corn.

After the corn has all been coated with tar, stir in a drier, like fine sifted ashes, meal, flour or dry dust. Stir this in until the corn is dry, then sift the remaining ashes or other substance and allow the corn to stand a day or two. It can then be run through the planter without difficulty, but the planter will have to be set to plant slightly more than when using corn that has not been treated.

Tarred corn will not be troubled unless the crows are unusually hungry, and in most cases only a few hills will be pulled, when it will be left. This remedy is not so effective for blackbirds as for crows, as they seem to have a better appetite for the tar than the crows.

Another remedy that is being tried with some success is sulphur, using a handful in the planter to every two or three quarts of corn. It is claimed this will also prevent the injury to the corn by wireworms and insects. B. F. W. T.

## *A Progressive Agricultural Heretic*

[continued from page 4]

something other than plant-food that stunted the plants before.

"When it comes to the practical side of it, we have pots of soil, wire baskets with a hard-pan of paraffin on the outside which give more nearly the field conditions of soil. Suppose we grow wheat in one of these, crop after crop, letting it grow three weeks or so, and then taking out the plants and putting in fresh ones, until the soil gets wheat-sick and won't support life in the plants. Then we mix with the soil ground-up green cow-peas.

"We'll have two pots for that. In one pot of wheat-sick soil we'll put ground-up green cow-peas, and we'll plant in wheat-seedlings immediately. In the other we will mix up the ground-up green cow-peas, and we'll wait, say, twenty-six days before we plant the seedlings. As a result, we get a better crop of wheat out of that last pot than we did out of the original soil before it was made wheat-sick. What's the reason for that?"

### Breaking Up the Toxins

"The cow-pea is a legume and gets nitrogen out of the air, which it restores to the soil," I answered.

"But the growth of the plants in the soil which had the cow-peas put in and the seedlings immediately following was just a little less than the growth in the original untreated soil, while the growth in the soil which waited twenty-six days was thirty per cent. better than in the original soil. There was just the same amount of nitrogen from the air put into the soil both times, according to your theory, but the yield was thirty per cent. better after the wait. How do you account for that?"

"How do you?"

"The green manure had time to decompose and to break up the toxins. If legumes improve the soil by adding nitrogen, how comes it that soil can become cow-pea sick, so that it won't grow any more cow-peas, though wheat will thrive in it?"

"But if commercial fertilizers do not add plant-food to the soil, what is it they affect?" I asked. "It is plain enough that they produce good results. The 'plant-food' theory is that they restore food robbed out of the soil. But you say there is as much plant-food as ever, but that there are poisons left after a crop which hinder the success of the next crop of the same plant or one like it. Just what do fertilizers accomplish?"

"It looks as if they helped the plant break up these poisons left by the preceding crop. You must remember that the plant is alive. The inorganic salts in fertilizers seem to have much the same effect as the condiments on your food. They don't add anything to the nutriment contained, but they make the food taste better, and so help you to digest it and get the good of it. The condiments do not digest the food; you do that. And the plant-roots, when the poisons in the soil have been diluted enough, can break them up themselves. We have taken vanillin, the principle of vanilla, which is injurious to wheat-plants, and by diluting it with distilled water the plants were able to destroy it so that none could be found."

"What's going to be the effect of this theory of yours on agriculture generally?"

"Don't call it my theory. De Candolle advanced the idea as long ago as 1832 that plants excreted waste products injurious to themselves, which other plants could use as food. But De Candolle failed to appreciate the fact that these excretions could be destroyed by cultivation, which would utilize the oxidizing power of the air, by the action of micro-organisms in the soil, by the assistance of fertilizers and by the ability of the roots themselves to do away with these injurious substances."

### Getting at Mother Earth's Secrets

"We shall undoubtedly discover what the proper fertilizing agents are for each particular type of soil, and what the natural rotation of crops for it. It looks as if cow-peas and lime were about the most satisfactory fertilizers or, rather, the agents which best help the plant to break down those toxic substances."

"All that you have said has tended only to make it probable that there are these toxic substances in the soil. But that is only inference. Do you actually know that they exist?"

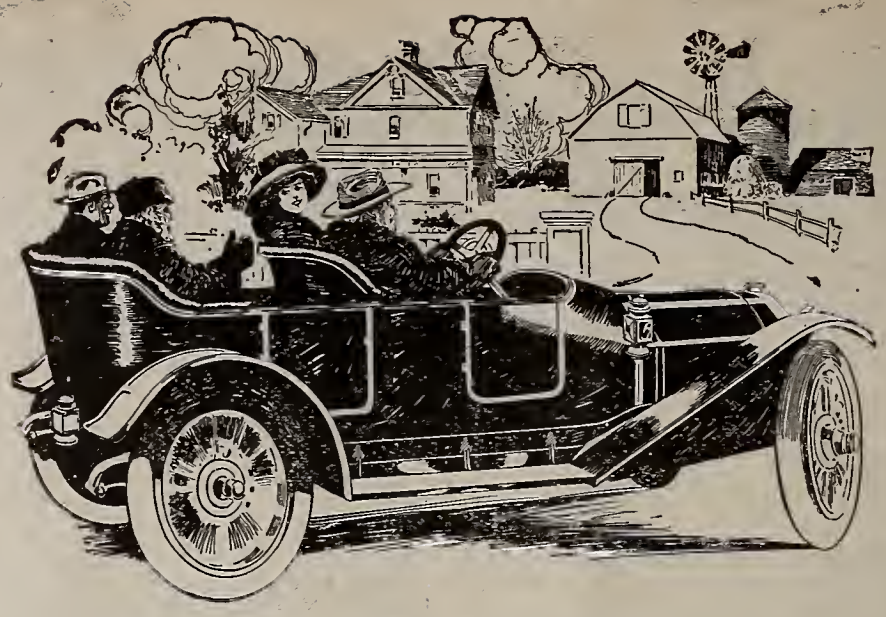
"Yes, we do. We know of various substances (and he named a dozen chemicals), but more than that: This department, for the first time in history, has separated from infertile soil itself some of the substances which the plant has thrown off."

The men in the laboratory showed me bottles of different substances. They told me the names of them. But "dihydroxy-stearic acid" and "picoline carboxylic acid" and all that do not convey much information to me.

Do they to you? Still, to handle the little glass bottles seemed sort of convincing. And Oswald Schreiner and Edmund C. Shorey seemed to feel that they had done something worth while. So I suppose it's all right. Parenthetically, I oughtn't to give credit entirely to Professor Whitney for all the material in this article. Doctor Schreiner and Doctor Shorey are entitled to a good share.

I struggled through their published statement of the processes they used to isolate these substances hitherto unknown in all the history of the world. It was knowledge far beyond me. What's the practical good of it? What's the practical good of a baby? It's what the baby may grow up to be that counts. Such patient research, such undaunted determination to wrench the secrets of the soil out of stingy Mother Nature's fist, simply must accomplish great things in the near future.

Let's live and see developments in agriculture equal and superior to what have been in other arts and industries.

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An automobile is the greatest labor saving, time saving and money saving machine a man can have on his farm. Don't make the mistake of thinking it is merely a luxury. To be sure the fellow who runs a car gets twice the pleasure out of life, but sum up the practical uses he can put it to. Today the farm minus an automobile is seriously handicapped. Thousands of shrewd farmers all over America own and operate an

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These same men tell us how much quicker and better they can get to town. How they can take a small gang of men—pack them off to work and be back in a jiffy. How the women folks use it for marketing and making their little social calls. How quickly a broken fence or something else at a distant end of the farm can be mended. How trains are caught—friends are met—business appointments are kept. How much nearer it brings all the surrounding territory and neighbors.

And these same warm *Overland* friends write us of the reliability of the car. How it goes through thick and thin in all kinds of weather and never turns a hair. There is probably some *Overland* owner near you. Look him up and ask him yourself.

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# Farm and Fireside

## The National Farm Paper

ESTABLISHED 1877

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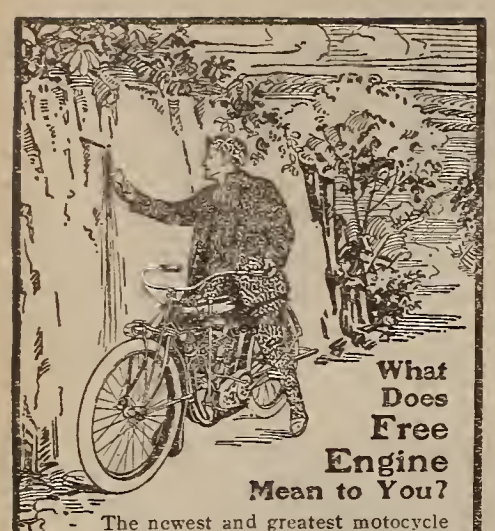
A Splendid Article on the National Egg Supply—Page Four



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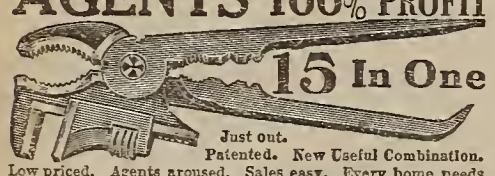

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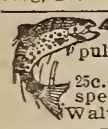

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**M. J. GIBBONS** DEPT. D. DAYTON, O.


# With the Editor

SINCE I took my typewriter in hand to write you last, I have attended a parcels-post conference in Washington. It was called by Mr. James L. Cowles of New York, secretary of the Postal Progress League, of which Mr. Beach of the *Scientific American* is president. Mr. Cowles has talked parcels post in season and out of season for a generation. He is a crank about it. He is such a crank that his eyes fill with tears when he speaks of the benefits which will come to the people from parcels post. You know that sort of man.

The idea burns them up so that they feel nothing but the burning. They do not stop for ridicule, disappointment, reverses of fortune, or anything else—the burning of the idea forces them on against all these. Some call them cranks, others call them fanatics. If they draw into themselves a sheaf of hostile weapons, as did Winkelried on a battlefield to open a path for his comrades to attack the enemy, they go down into history as patriot martyrs; but if their luck is to wear themselves out and kill themselves off fighting criminal combinations of predatory capital, they are called bores and cranks. Well, Cowles is of that admirable and pestiferous breed.

I SAID that he has talked parcels post in season and out of season. A lot of his talking has been out of season, many people have thought, and so the reporters refuse to pay any attention when he calls a conference. But this time Mr. Cowles surprised them. There was real news in the conference. The Granges pretty well over the nation were represented. People are fond of saying that the farmers don't care about parcels post, but the farmers came in and took charge of the conference. They did business, too.

The Postal Progress League is a body organized for general postal progress. It believes in doing a lot of things for the postal service besides giving it parcels post. But the conference had its mind set on parcels post, and that alone. So it appointed a committee for confederating all the parcels-post organizations in the country into an association of associations, for better team-work. If you want to know about this, write Mr. F. F. Ingram of Detroit, Michigan. He is chairman of the Committee on Organization of the National Postal Express Federation—which is the federation I spoke of.

It doesn't mean that the other organizations shall be swallowed up in the new one, but rather that there will be more of them and more active ones, all working in harmony, like a national league of political clubs—in fact, a federation. It may be worth your while to ally your association with it.

THE conference had in its membership the best-known parcels-post workers in the land. Nathan B. Williams came from Arkansas. He is the man who has been making the welkin ring down that way with the noise of his battle against the express companies. George J. Kindel of Denver was there, too. He has been harassing the railways for better rates for years, in about all the courts the Denver lawyers knew about. George P. Hampton was there, representing the wing of the Grangers which regards itself as the most militant and progressive. J. H. Hale of Connecticut was there to speak for that wing of the Grange that regards itself as most sensible and conservative.

But they both worked for parcels post as for a thing desired by all farmers, radicals and conservatives. H. L. Loucks was there from South Dakota. Since the entire country went Populist, Loucks has been embarrassed to find a really needy cause in which to fight, but parcels post appeals to him as a new abolition movement, and he is fighting again.

The meeting enjoyed itself. Congressman D. J. Lewis of Maryland, who is going to be heard from, contributed to its ideas the thought that, as long as the express companies get a rate from the railways for carrying parcels of about one fifth the rate paid for the same services by the government, the government may well consider the possible necessity of taking over all the express business, including its railway contracts, and become the whole thing in parcels-carrying. Coming from a member of Congress, we thought that fairly advanced.

MR. WILLIAMS of Arkansas injected into the deliberations a sense of the importance of enforcing the criminal law against the business of carrying parcels or "packets" over mail-routes, and the conference passed a resolution asking Congress to define the word "packet" to mean all mailable matter, and to enforce that section which makes the carrying of mailable matter by express companies a crime. As a matter of fact, the express companies are founded on a violation of law, and have been criminals every day of their existence. The conference asked Congress to take notice of the matter.

All this will show you that the conference was a live one. Speaker Clark is convinced that the parcels post is coming. If we all get busy writing our congressmen and senators telling them how in earnest the farmers are for parcels post, we might get something done this session. We might get a bill through the House, anyhow.

Why not write, even if you are busy? The less we have in the way of transportation, the busier we'll always be—just making a living. If a million letters and post-cards, written by the hard hands of farmers, even though misspelled, scrawled and smudged by the earth of toil, went into Congress within the next month, the day would be won. Because the men in Washington would know that the hard hand that wrote was in every case urged by a brain in rebellion against this long paltering with our right to a real postal system.

AND if every farmer would say in his own words, **"Any local parcels post will be a failure unless it is good at least fifty miles from the originating post-office, or if it provides for a rate of more than twenty-five cents for an eleven-pound package,"** we may be saved from the delusion of what the present administration calls a **rural parcels post,** good only on the rural lines out of the originating post-office.

The farmers could give themselves parcels post if they would awake and make their demands known. Many congressmen are undecided. They are willing to vote for parcels post if they hear from the country that the country wants it. This means that they will go home and say to the farmers: **"We got many petitions against parcels post, but scarcely any for it. And I don't believe the farmers care much for parcels post. Hardly any of them wrote me about it."**

That's the old, old story. Because the farmers are mute and inactive, the betrayers of their interests are able to show a good cause for the betrayal. Farmers are almost all for the parcels post. Why can't they say so to their representatives?

Herbert Quick

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# FARM AND FIRESIDE

PUBLISHED BY
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Vol. XXXIV. No. 16 — Springfield, Ohio, May 25, 1911 — PUBLISHED SEMI-MONTHLY


The muscular age is of the past. The reading, thinking age is the present one.

Nothing is more needed along agricultural lines than the continued study of facts relating to this great basic industry.

Bread and beer cost alike per loaf or glass; which would you rather have in old age—the price of many loaves, or the memory of vanished drinks?

## What's It Raining to You?

BYRON says that nothing destroys the ecstasy of love like a pain in the stomach. Similarly, nothing obscures the beauties of rain poetry so effectively as the sight of drowned fields and the suck of the mud on overladen boots. A reader who feels the dampness more than the divine afflatus favors us with the following, "with apologies to Robert Loveman:"

That is a beautiful poem on the cover page of the April 10th issue. I think it fine!

But I cannot help thinking that, if a few of these poets and extreme optimists were trying to get the spring's work under way, they would sing in a modified key about like this:

It isn't raining rain to me,
  It's raining unpaid bills;
In every dimpled drop I see
  More washouts on the hills.
The clouds of gray have had full sway
  For three weeks now or more;
It isn't raining rain to me,
  It's just the daily pour.

It isn't raining rain to me,
  It's just embryo snow;
And every buccaneering bee
  Was drowned two weeks ago.
Gum boots for all the family—
  I hope that it will stop,
For all this rain will end with drought
  On our belated crop!

Of course, this is one side of it. When this realistic parody came in, the editors wondered if they hadn't been too sentimental and sort of bubbly. Soon after, another letter came in—one of many, which is our vindication and rejoinder—better than we could have written. Here it is:

I want to thank you for publishing that lovely poem on the front page of the April 10th number of FARM AND FIRESIDE. It is one of the most helpful and uplifting things I ever read, and an exquisite and beautiful poem.

I immediately cut it out, mounted it and sent it to an invalid sister in another city for an Easter-card.

I want to send a copy of it to a friend who loves beautiful things, but whose life is a constant struggle with poverty and hard conditions.

What's it raining to you?

## To the Blade That Hath Shall Be Given

SHORT pasture is generally supposed to be good pasture if it is not too short. We are apt to think that the grazing is best when it consists of the short new shoots of tender grass. Remember, however, that rapidity of growth is according to size of leaf. Grass may be kept so short that it can hardly grow. A grass blade half an inch long and an eighth of an inch wide has only one eighth the surface of one two inches long and a quarter of an inch wide. The bigger blade, all things considered, will grow eight times as fast as the smaller.

Notice how the corn shoots up when it acquires leaves big enough to serve as organs for rapid growth. Notice, too, how the plant with leaf difficulties stands still and fails to grow. The leaves are the organs of growth even more than the roots. Therefore, don't feed the pastures too close.

When the lungs of the plants are too small, growth slows down. When the pasture gets so short that the dew fails to wet the cows' dew-claws, take the bossies off and feed them. The pasture will rally four times as fast if allowed to do so, when the blades are four inches long, as when they are two—because the four-inch blade is usually four times as big as the two-inch one. Leave the pasture its lungs.

## Pure-Food Ruling on Oranges

THE crafty orange-growers of the Pacific Coast have found out how to color green oranges to look like ripe ones, by holding them in heat and moisture for a short time. They ship better than ripe ones, but they aren't as good to eat. Moreover, they hurt the stomachs of those who consume them. The government has decided that such oranges are "adulterated" within the meaning of the Food and Drugs Act, and rightly so.

The monarch oak, the patriarch of the trees,
  Shoots rising up, and spreads by slow degrees.
Three centuries he grows, and three he stays
  Supreme in state; and in three more decays.
DRYDEN.

## Dogberry the Retailer

WHEN you go to town, carry the wrapper of your last mail-order-house catalogue with you, and show it to your local merchant, who is, in all probability, a bitter opponent of parcels post. Let him see on the wrapper the words "Express prepaid" in print. Ask him if he really thinks the catalogue-houses want parcels post; and find out how, as a sensible man, he can oppose a system of sending parcels which he could use on equal terms with the catalogue-houses, as against the present one, which offers it terms which are denied to the local merchant. Practically, the local merchant says, "'The parcels post would be open to the use of myself and the mail-order houses on equal terms, therefore I am opposed to it. I prefer the express system as at present constituted, which discriminates in favor of the big houses." And then he should add this quotation from Dogberry, in Mr. Shakespeare's most excellent comedy, "Much Ado About Nothing:"

"But, masters, remember that I am an ass: though it be not written down, yet forget not that I am an ass."

## A "Friend's" Advice

FOLLOWING is an account of a tragedy in real life, which we clip from a daily paper. It is entitled "A Friend's Advice Fatal."

* * *

Heart-broken over the death several months ago of her baby daughter, Gertrude, for which she believed herself responsible, Mrs. Gertrude Beeger, thirty-nine years old, committed suicide last night by gas asphyxiation in her home, 515 Fifteenth Avenue, Newark, New Jersey.

The body was discovered by her husband, Joseph, and her ten-year-old son, Joseph, when they reached home after visiting friends. Two gas-jets were open, and on a dresser was this note, addressed to her husband:

> DEAR JOE:—Had I never spoken to that woman, my life would still be happy. My life isn't worth living since I made that fatal mistake. Take good care of the boy. I love him still. All I lived for was my children. O God! O God! For me to make that mistake; I who loved my children to the verge of madness! Oh, that I had never been born! Good-by.
> GERTRUDE.

The mistake referred to was that Mrs. Beeger, on the advice of a friend, when little Gertrude was taken sick with whooping-cough, had given her a patent medicine, instead of calling a doctor. The child died six days later, and the mother could never forgive herself.

* * *

We are glad that FARM AND FIRESIDE is not among the "friends" who advise people to take patent medicines. We may mistakenly give fallacious advice as to care of live stock, crops or any other branch of farm work, and our errors may affect the pocket-book. But when he, who publishes abroad the literature of the patent-medicine trade, blunders in his advice, he blunders murderously. There is a difference.

When a man begins to run a store debt, he begins to lose faith in humanity. Keep up with your bills. It is the only sure road to happiness and prosperity.

## "Schedule K"

"OUR sheep industry, in which are engaged a million farmers and ranchmen, with an investment of $500,000,000, is in jeopardy!" So begins a circular issued by the American Sheep Breeder Company of Chicago, and which has been sent us. The point of the appeal is that the wool schedule is about to be revised, unless we, the farmers, write, telegraph, telephone and otherwise make known to senators and congressmen that "Schedule K" must and shall not be revised. We know not, as John Adams is supposed once to have said, what you and other men may do, but, as for ourselves, we shall not heat up the wires, nor clog the mails with our protests.

If the sheep business depends on the permanence of "Schedule K," it is really in jeopardy. For, no matter what we may say, "Schedule K" is going to be revised. It has been condemned by President Taft, even in the same speech in which he declared the Payne-Aldrich bill the best we ever had. It has been attacked as the best concrete iniquity on earth by the insurgent Republicans. It has been condemned by the Democrats, now half in power. So if the writer's flock of twenty sheep is to spoil on his hands because of the revision of "Schedule K," so be it. The taxation of rubber boots, pianos, parlor furniture, and the like, as woolen goods, because "made wholly or in part of wool," will not be endured longer by the people. It may be true that a million farmers are engaged in the sheep industry; but there are some thirty million of us, and fifty million town dwellers, engaged in wearing clothes—not to mention those other things "made wholly or in part of wool." Besides all that, we cannot forget that the British sheep-growers make money without any "Schedule K," on land that is worth twice as much rent per year as ours. Flockmasters must rely on their own skill for prosperity, and not depend on the government.

# Country Women, Egg Prices and Congress

## How Unwise Legislation Will Affect Our National Egg Trade—By H. C. Taylor

MR. H. C. TAYLOR, Professor of Agricultural Economics, at the University of Wisconsin, is a national authority on problems of farm finance. It is with pleasure that we here present Mr. Taylor's views on a very important subject.—THE EDITOR.

THE Secretary of Agriculture has said, "Poultry products have climbed to a place where the hen competes with wheat for precedence." The poultry business is more widely distributed than wheat production. The wheat industry is concentrated in relatively small areas, where the soil and climatic conditions are especially fitted, but the poultry business is scattered throughout the country wherever farms are found. In the regions where negro farmers are abundant chickens are not so generally kept as in regions where white farmers prevail. In fact, when a map of the United States showing the distribution of poultry is compared with another map showing the distribution of white women on farms, there is a close and a very surprising resemblance.

### Women the Poultry-Keepers

It is to the farmer's wife that the hundreds of millions of dollars' worth of poultry and eggs annually produced in the United States must be credited. American country women are not toilers in the field as are their European cousins, but this does not mean that they have lost all interest in the problem of making the farm pay. The poultry industry plays a very large part on the well-managed farm, and in most cases this is peculiarly the woman's part in the income-bearing industries of the farm.

Freedom from toil in the field would be no real emancipation if this freedom were not accompanied with an opportunity to earn an independent income. The toil in the field brought no income which was distinct from the general income of the farm. It resulted in no income which was peculiarly adapted to be set aside for the woman, but the income from poultry is separate and is usually received directly by the woman and disposed of in any way she pleases. This is one reason why women on dairy farms prefer working with poultry to work in the dairy. The income from the dairy is a joint product, and the tendency is for all of it to be kept in the farmer's purse. Where but few cows are kept and the butter is made for sale by the housewife, butter is added to the sources of independent income, and milking and churning are not the work of a bondswoman, but the free labor of love for an independent source of income.

Aside from giving the farmer's wife an independent source of income, the poultry business is full of significance in that it gives the woman a chance to do business on her own account. This is the school in which the country women of America are learning to be business women as rapidly, if not more rapidly, than their husbands are becoming business men, in the production and sale of their crops and live stock.

Through the sale of eggs, for example, the farmer's wife comes in contact with many phases of the business world. The price which she receives for eggs is affected by conditions at many points between the local buyer and the city consumer. Conditions under which eggs are kept at the local market affect the price she secures for eggs. What woman does not know, when she sees a dozen cases of eggs stacked in a hot corner of a country store, where they will rapidly lose their freshness, that this very fact reduces the price which the storekeeper can get for the eggs, and in turn reduces the price which he can pay.

### Business Interests Lead to Political Interest

It is a matter of common knowledge that the railway has made possible the marketing of eggs at great distances, and in this way greatly increased the profits of egg production. There are those who can remember the day when it took a dozen eggs to buy one spool of thread. It has been the railway in part that has changed conditions in the marketing of eggs, but it is also a matter of common knowledge that the higher the freight rate from the local market to the large city where the eggs are sold, the lower the price which can be paid on the local market. Through the sale of eggs the farmer's wife becomes vitally and directly interested, not only in the railway, but in cold storage, and in all the middlemen processes, from the local buyer to the retailers in the distant market. This whole process of marketing requires government regulation, both from the standpoint of maintaining a sanitary food supply and from the standpoint of maintaining fair rates for middleman services.

The farmer's wife comes in contact with many similar problems as a purchaser of food and clothing for her household, so that both as a producer and as a consumer she is interested in the business world. It is through the contact wth the business and political world that the country women of America are becoming trained for their part in political life. Economic forces dominate the modern world. Men rise to independence and power by keeping their feet well planted upon some important industry. The first step for the egg producer and the egg legislator, if they would act wisely, is to study the causes which influence egg prices.

### Study Prices and Markets

The careful study of egg prices by the producer will lead to better management of the hen and better care of eggs. The study of the natural laws and the business organizations which operate on the egg market will enable the legislator to act wisely in the presence of blind guides, who, out of their untutored emotions, express with vigor and enthusiasm that which has little basis in fact. The truth, and the truth alone, will give free and intelligent action and no future regrets.

The ballot has some influence over legislation, but public opinion has more. A clear vision of the truth is the starting-point if one would mold public opinion.

The one great agricultural interest of America which is peculiarly a woman's industry is in danger of being depressed by unwise legislation. The time is ripe, therefore, for the country women of America to make themselves heard on the question of the cold storage of eggs. In arriving at the truth regarding the egg situation, the following information may be found useful as a guide for action.

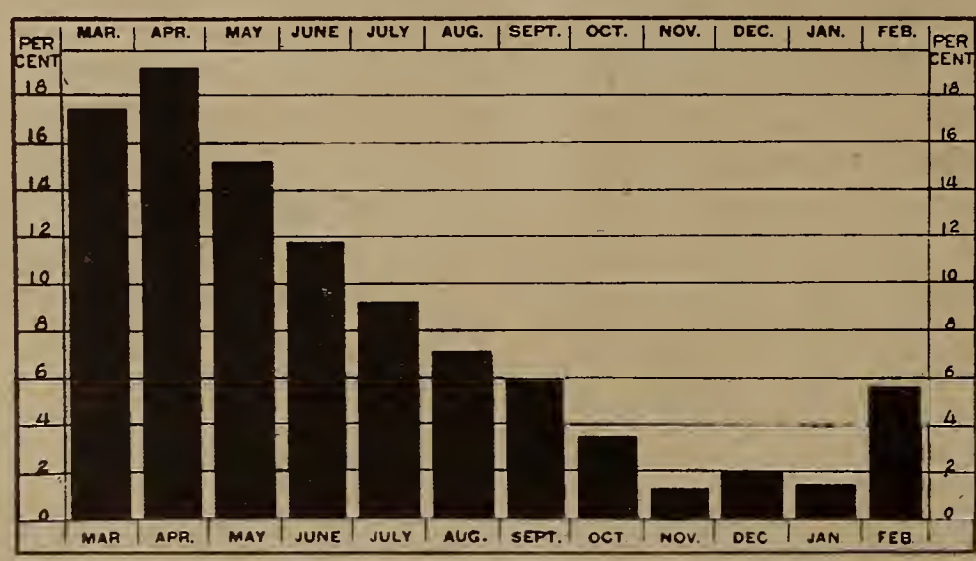



Chart I. The Proportion of the Annual Egg Production Laid in Each Month of the Year, on One Farm, a Five-Year Average

### The Egg Supply is Irregular

The monthly distribution of the annual production of eggs on one farm in the North Central States is shown in Chart I. The chart shows the percentage of the year's egg production gathered in each month of the year. This chart is based upon a five-year average. March and April were the months of greatest production. The production fell off greatly during the summer months and reached its lowest level during the winter.

It is possible for the poultryman to control the egg production in such a manner as to secure a much larger proportion of the annual product in the winter months, and this is a subject which should be carefully considered by the producers who live close to city markets and who can get their eggs to the consumer without danger. The other method of supplying the winter demand is to store the surplus of one period to supply the demand of another period. At the present time the bulk of the egg supply is not produced under these conditions. The bulk of the supply comes in the spring months.

The supply of eggs upon the Chicago market corresponds to these conditions of irregular production. In Chart II. the solid black line represents the weekly supply of eggs brought to Chicago. The chart covers the period from February 1, 1909, to March 20, 1911. The supply of eggs was greatest in April and May, and gradually fell off until the end of the year.

The price of eggs on the Chicago market shows the influence of the irregular supply. The black dots connected by lines, in Chart II., show the price of the best grade of eggs for one day in each week.

The relation between the supply curve and the price curve in this chart illustrates the influence of variation in the supply upon the price of this perishable commodity. The fact that the price of eggs in Chicago remained above twenty cents during the periods of greatest receipts in 1909 and 1910 calls for some explanation. The elastic character of the demand for eggs has already been mentioned. At a price between twenty and twenty-five cents, eggs become an inexpensive substitute for meat, and at the time of year under consideration weather conditions are usually such that eggs can be put upon the market in good condition. Under these circumstances the consumption of eggs expands enormously.

Chart II. Supply and Price of Eggs on the Chicago Market. Quotations for Refrigerator Eggs are Given Only in Winter Months. Note Relation Between Supply and Price of Fresh Eggs, Also the Wide Range Between Price of Fresh and Refrigerator Eggs

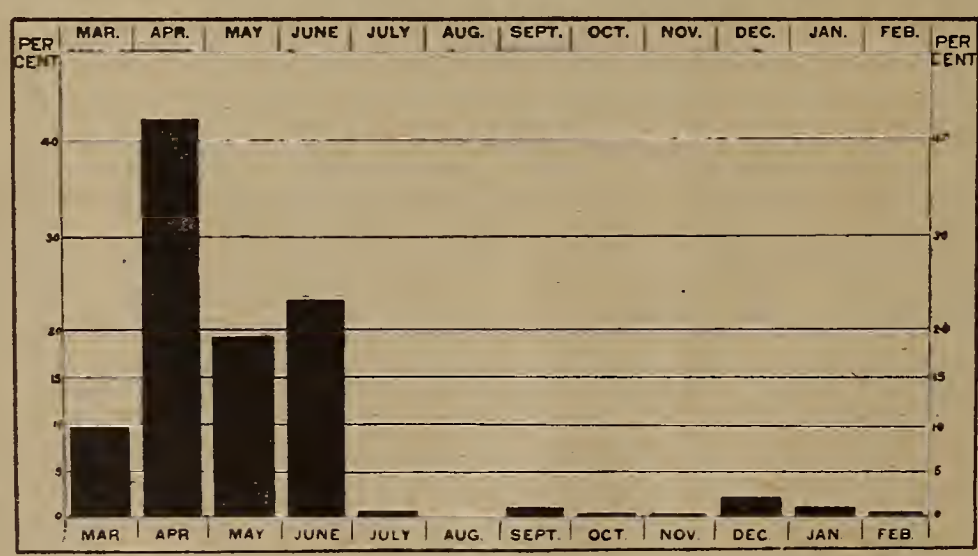



Chart III. The Proportion of the Annual Storage of Eggs Placed in Storage Each Month by One Chicago Firm

### The Storage of Eggs

The market is not entirely dependent, however, at the period of maximum supply upon the demand for eggs for immediate consumption. At that period many eggs are purchased and put in storage for use during the period of scarcity of fresh eggs. Without question this speculative buying steadies the price during the spring months of excessive supply, distributes the consumption more evenly through the year and secures for the producers a higher return for their eggs than could be secured without storage.

The positions of the small circles connected with lines, in Chart II., show the prices of refrigerator eggs during the winter months. It will be seen that there is often a difference of ten cents per dozen between the prices of fresh and stored eggs. Especial attention is called to the fact that the price at which the refrigerator eggs are sold is not very much higher than the price at which they were purchased. There must, in the long run, be enough difference to pay the actual costs of storage, including rent for the warehouse, losses due to deterioration, interest on the money invested, insurance and enough profit to induce a business man to give his attention to this business instead of doing something else. These charges are not very great per case where cold storage is provided on a large scale. One who uses refrigerator eggs in the winter can buy eggs the year around at a fairly even price. [CONCLUDED ON PAGE 10]

# "The Best Tool I Use"

## A Page by Farmers Who Work with the Best Tools and Study the "Know How"

### The Manure-Spreader

No, I am not a farmer, but a farmer's wife without any mechanical aptitude. Therefore, I judge the value of agricultural machines and implements by the results obtained by practical use. Who is not familiar with the old-time method of hauling manure from stable to field?

Here is a picture of it before we got our spreader: The heavily loaded wagon is laboriously drawn by two horses. The field reached, one of the two men needed draws out the hind gate, while the other yells "Whoa!" One, or possibly both, pushes out a little manure with forks. With a "Get up" and a mighty jerk the team starts again. Process repeated, with slight variations, all morning. The welcome sound of a dinner-horn is heard, and soon two tired men are seated at a substantial meal.

"How did your work progress?" "Ah, slowly, slowly," murmurs her husband, who, if anywhere near the meridian of life, has such a pain in chest or back that his appetite is not up to the usual standard. A few days of this and a small field is covered with lumps and masses of unevenly spread manure. The wife sighs, the children forbear their merry chatter, for the "Gude Mann" is so irritable.

About the third or fourth morning she is glad to hear him say, "Jim, we will let the colt's stable go and work on the line fence to-day." Thus often ends the disliked, difficult task, and commercial fertilizer that is bought later is paid for with hard-earned cash. But now what a change. The manure-spreader is abroad in the land!

As we women of the grand old Volunteer State go about our household tasks, a cheery whistle attracts attention. Glancing out of the window, we see a slender boy in his teens. Yet how skilfully he drives his horses, three abreast, harnessed to a modern, improved, up-to-date manure-spreader.

Back and forth he drives quickly over the field, the manure falling almost as softly and evenly as does the snow from heaven. The bed is now empty and he trots to the barn, a

"Eighteen loads out to-day"

helper to load, and he is back in short order. Of stops and hitches there are none. Boy, stock and spreader work together in unison and perfect harmony.

At supper a cheerful voice announces, "Got eighteen loads out to-day, and the team still fresh." Soon the stables are thoroughly cleaned and all enriching material gone to feed the expected crops. I cannot write learnedly of "roller bearings," "front trucks," "wide aprons," and so on. but three cheers for that great labor-saver, that great economist of waste material, the modern manure-spreader.

JESSIE H. PARKER, Tennessee.

* * *

My preference is the manure-spreader, because it gets the fertilizer equally distributed on the spots you want it, and not in piles here and there to burn up. I also consider it a labor-saving, money-making tool that any well-regulated farm should not be without even if one has to pay interest on his money.

If there is any tool that will bring more profit to the farmer with a manure-spreader, I would say that it would be another manure-spreader. WARREN HUTCHINS, Iowa.

* * *

The first reason why I consider the manure-spreader my best tool is that it saves so much time and labor. In our barn the horse and cow stables adjoin, so that we can drive in with the spreader at either end, load on the manure and haul it out into the field, doing it all in less than three quarters of an hour. Our spreader holds about seventy bushels.

We haul our manure into the field during the winter months when the weather permits. By hauling out the manure in winter, we have less to take out in the spring and autumn, and this lessens the work of the busy season considerably.

Also, I use the manure-spreader more months out of the whole year than I do any other tool. What other implement can one use on an average for six months out of every twelve? The conclusion of the whole matter is the well-known "agricultural cycle." The ambition and obligation of each farmer is

To raise more corn,
To feed more hogs or cattle,
To make more money,
To buy more land,
To raise more corn, and so on. And this cannot be accomplished without the manure-spreader, the best tool I use.

RAY L. CARR, Illinois.

* * *

The best tool or implement that I use is without doubt the manure-spreader. In the first place, by its use we save that hard and disagreeable task of spreading by hand and, instead of fifteen or twenty minutes unloading, the same work is done in from two to

Unloads in two to four minutes

four minutes, which is quite an item in these days of high-priced labor and scarcity of help.

But the more important reason is the quality of the work. Now, from my own experience with the use of the spreader during the last three years, I fully believe that one load machine-spread will go twice as far as the same amount spread by hand, thus doubling the value of our manure crop.

The reason for this is obvious, namely, that the ground is partially covered with minute particles of manure which are within reach of the plants and at once become available as plant-food, and again the ease and thoroughness with which the manure is applied is an incentive to most men to be more careful in the saving of this most important farm crop.

It's "Play in comparison"

From my own practical experience I believe that by the judicious saving of barnyard manure and the use of the spreader the earning capacity of a hundred-acre farm can be doubled in five years. I think that the manure-spreader has no superior among farm tools as a labor-saving and money-making device, and no farmer who has as many as fifty acres can afford to be without one.

N. M. POOLE, West Virginia.

### Riding-Cultivator

THE best tool I use is the riding-cultivator. You can ride from morning until night and feel almost as fresh in the evening as you did in the morning.

There may be cultivators just as good as the one I use, but I do not see how they could possibly work any easier either for man or team. We must put in our best "licks" when the corn is growing, so you see it is advisable to have number one corn tools.

The operator has perfect control

F. A. ROBERTS, Ohio.

* * *

I place the riding, pivot-axle wheel-cultivator at the head of farm tools, because of the first-class work it does as a cultivator, and then its adaptability to other uses makes it preëminent as a farm implement.

The ease of manipulation on any kind of soil, either on hillside or level land, its adjustability to different width rows, also the absolute control of the pivot axle, make possible the cultivation of uneven rows.

Furthermore, the construction of the wheel-cultivator is such that it puts the operator directly over his work, enabling him to see at a glance just what each plant or hill needs, and by the judicious use of controlling levers either light or deep cultivation is at instant command.

H. S. FUDGE, New York.

### The Hay-Loader

MY HAY-LOADER is my favorite tool. It rakes, pitches and partly loads the hay, doing the work of two men. Therefore, it is worth in wages four dollars a day. In making twenty acres of hay, it saves sixteen dollars, about paying for itself in three years. It hooks into a ring on the back end of the hay-rack, three horses drawing the wagon and loader, and placing the hay on the wagon the whole width of the hay-rack. Our hay crop is handled entirely by machinery. The modern

"The farmer is now on wheels"

farmer is now on wheels, but has to touch ground at meal-time; everything goes of itself but the stove. A. C. MILLER, Ohio.

"It cuts and covers weeds by the million"

### The Mowing-Machine

I LIVE in southwest Missouri, in a section of country especially adapted to growing most all kinds of tame grasses. As much of it is cut for hay, the mowing-machine is, therefore, my favorite tool. I can well remember when we had to cut all our grass with the scythe or the "mowing-blade" as it was usually called then. One acre of ground was as much as the average man could get over in one day. My father used to say, "Boys, let's hurry up about the chores and get out to the meadow-field, for the grass cuts so much easier while the dew is on."

And with a good scythe it was nice work during the early morning hours. But, my! As soon as the sun got up and the dew began to dry, how the sweat would come. Mowing by hand, as all who have had experience so well know, is very hard, slow work. Mowing with a good, up-to-date machine is play in comparison. The present generation has so many labor-saving machines that it may be hard for some to say which is the best, but, for myself, I'll give the mowing-machine the first place every time as "The Best Tool I Use." J. W. DAY, Missouri.

### Team of Mares

MACHINERY is now so perfect that it is a most difficult task to say which is really the best or your favorite tool. On a well-equipped farm one finds a great pleasure in all their various uses. But where I get the most and greatest satisfaction is in a pair of big, strong, active, sixteen-hundred-pound mares, those wide-awake, energetic ones that rattle a mower along at a four-mile clip all forenoon, or, when it comes to the binder, all you have to do is to hitch them on to it and go. There is no hunting up the three-horse evener and hooking on the third horse away out there on the side where he is not used to working and adjusting onto him the third line. Yes, I get the most pleasure out of my big, fat, sleek mares, and the joy I get working with them would add ten years to any farmer's life.

"Big, strong and wide awake"

With this kind of animals and a good, kind "dad" at the helm, I really believe that a boy will be very slow about leaving the farm. ED. HENRY, Pennsylvania.

### One-Horse Cultivator

AFTER examining all my implements, I find the one-horse cultivator to be the best and most useful tool I use. Properly cared for, it will last almost a lifetime. I bought a five-shovel cultivator eleven years ago, for which I paid three dollars and fifty cents, including wheel. It is good for eleven years more, if kept in a dry place when not in use. The shovels are about six inches by two inches, sharpened at both ends. With a single lever you can adjust them to cut from one to two and a half feet wide.

I use this cultivator for all kinds of crops. For cultivating the garden, it is *the* tool. Going twice in a row thoroughly pulverizes the soil, also the weeds. It leaves a fine dust mulch, which is essential for retaining soil moisture. It leaves the ground almost level, no ruts to fill with water and then burst out, causing damage by washing. It is light and does not worry a horse. It is easily handled, if a wheel is used, no trouble to move it from one field to another.

In the potato-field it shows its usefulness again, for it leaves no ridges to dry out or hold pools of water.

In the corn-field it is again the best tool. It cuts and covers weeds by the million, but doesn't go deep enough to injure the thousands of root hairs that extend across the rows. W. T. SMITH, West Virginia.

### The Potato-Planter

MY FAVORITE tool is the potato-planter. Mine is a two-man planter. The furrow is opened by a double-disk opening-plow, which does not pack the soil as some plows do.

Behind the plow is the fertilizer distributor. This distributes the fertilizer in a broad stream, uniformly along the furrow. This has been proven to be the best manner of applying it.

Next comes a shoe, through which the potatoes drop. This mixes the fertilizer with the moist soil, and makes a narrow groove below the fertilizer, into which the seed-piece drops and sticks, preventing uneven spacing of the seed.

The fertilizer does not touch the seed in sufficient quantities to injure the buds. Last, come the covering-disks. These fill in the furrow, and throw up a ridge exactly over the row, enabling one to cultivate the field before the plants appear. As the soil has no chance to dry out, conditions are most favorable for a good stand.

The seed-pieces are elevated by a wheel, which drops them in the pockets of a revolving platform. A man sits behind this platform and sees to it that there is one piece,

The soil has no chance to dry out

and only one, in each pocket. Each operation is done perfectly. There are no missing hills if the picker is careful and the seed good. My potato rows were never straight, until I got a planter, as the pieces would roll in the furrow, when dropped by hand.

After the ridges are harrowed off and the plants appear, there is left a space six or seven inches wide on each side of the row that is clean of all weeds.

The planter does perfect work, will put in from three to six acres a day and facilitates after-cultivation.

ALBERT H. DEGRAFF, New York.

### The Most Indispensable Tool

WITH elegant poise and symmetrical form,
A monument worthy its Maker's renown;
The acme of genius; possessing a charm
And power sublime when bedecked with a crown.
It possesses a tongue, an organ much famed,
To which busy wheels are attached, we are told.
On rubber foundations some rest, it is is claimed,
And others have caverns well studded with gold.

Some tools are of iron and some are of steel,
In others both metals combine
To fully develop the maker's ideal
And modern inventive design.
Still others of wood, with steel reinforced,
That for years have well proven their worth,
And many more kinds by the public indorsed,
All deriving their source from the earth.

Some are used in the factory and some on the farm
Advancement's great cause to unfold.
Their missions are many, their value a charm
And their worth to mankind is untold.
Each one was devised through necessity's plea
And to meet the increasing demand.
And each does its duty in every degree
When directed by man's guiding hand.

But the tool that is nearest Perfection's ideal
And with which no one long could dispense,
The one which responds best to Nature's appeal,
Is man's head with its hard common sense.

ALVA W. DUNN, Illinois.

### Headwork Awards April 10th

E. S. Caldwell, - - This Gate Won't Sag
Anton T. Pfeil, Portable Watering Device
N. C. Williams, - - Folding Feed-Rack

# How to Ship Poultry

## The Best Method of Preparing Dressed Fowls for the Market and Why

The government has made tests of a large number of shipments of poultry, to find out the best preparation for shipment, in order to have the carcasses keep. The fowls were shipped in ordinary packages, in with others in car-lots, and were handled by packers, wholesalers and retailers just as other shipments. The results are very interesting, as showing how to ship chickens—if your trade can be made to agree with the government investigators.

An instrument called a thermograph registered all the changes of temperature, and thus a complete history of all these shipments was kept.

### The Four Methods of Preparation

The chickens were divided, in each shipment, into four lots, according to the way they were prepared. One fourth of them were undrawn, that is, they were well bled and brained—as were all that were allowed to retain their heads—and the feet of all which were allowed feet were scrubbed clean. The heads were wiped free from blood and wrapped in parchment paper.

The second fourth were "wire drawn," that is, the intestines were pulled out by means of the finger, cut off close at the vent, and then pulled out entire, until broken at the gizzard—a common way of drawing fowls.

The third quarter of each shipment were "Boston drawn," that is, the vent was cut around so as to free the intestine, and then the whole of the viscera were pulled out to the gizzard as in "wire" drawing.

The rest were "full drawn." In other words, the fowl was cut open in the ordinary way by a cut across the abdomen; the vent was removed by cutting around it as in "Boston" drawing; the head was cut off; the inwards removed; the heart, liver and gizzard were cleaned and put back into the body cavity; the shanks were removed, and the hocks turned and thrust into the body cavity—all according to the best methods of catering to the best trade.

All the birds were dry-picked, and all the work on them was well done—far better than the ordinary case—by the regular employees in a chicken-house.

Tests were made in the packing-house, where they were killed; at the wholesaler's, where they were distributed to the butchers, and at the retailer's. The tests were made for acid in the fat, which develops as the birds get "old" or "ripe" or "high;" for ammoniacal nitrogen in the flesh, which is another product of decomposition in meat, just as it is in manure, and for bacteria in the walls of the abdominal cavity, bacteria being the active agency in all rotting. A sample was taken from each lot, and the amount of acid found in the flesh was as shown in the accompanying chart.

Note that, even in the killing-house, the full-drawn birds were worse off than the rest in acid. At the wholesaler's the "wire-drawn" birds give the best showing, while at the retailer's the full-drawn birds, with which so much pains were taken, were nearly twice as far gone as the ones with the "works" left in.

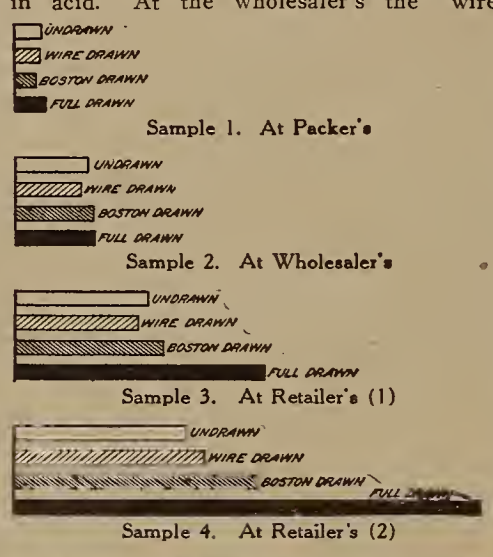



Fig. 1. Changes in acidity of body fat, comparing four methods of dressing

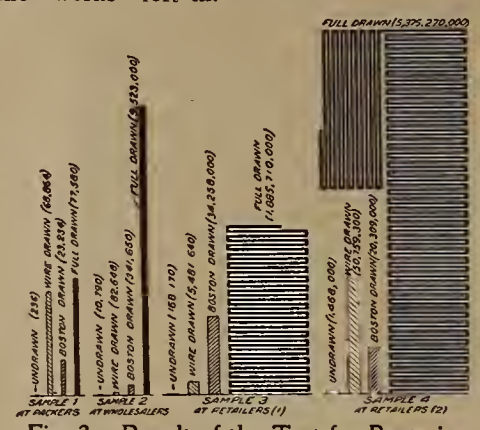



Fig. 3. Result of the Test for Bacteria

In the tests for ammoniacal nitrogen in the flesh, the full-drawn samples were freest from the evidence of decay at the packing-house; but look at the tests (Fig. 2) at the retailer's and wholesaler's! Again we find the full-drawn poultry in the worst shape, and the undrawn the best.

### Undrawn Poultry Were in Best Condition

But the thing which should open all our eyes is the tests for bacteria in the flesh of the abdomen wall. It will be seen graphically represented in Fig. 3. At the packing-house the undrawn birds had only 236 bacteria in each gram of flesh; the wire-drawn had 68.864; the Boston-drawn, 23,234, and the full-drawn, with its greater danger of contamination, 77,580. With such a start, one might well expect the full-drawn to decay faster than the others. But, in order that the reader may see just what the difference was, let him note that while in the two samples tested at the retailer's the column representing the number of bacteria in the undrawn birds is so small as to be scarcely perceptible, the column for the full-drawn samples was so long that the draughtsman had to fold it up and crumple it about in order to get it on the paper at all. There were 1,468,000 bacteria to the gram in the undrawn fowls, and about five thousand times as many in the full-drawn, that is, 5,375,270,000 bacteria.

The bulletin in which this is told says, "With one exception, the last samples of the undrawn fowls were still edible, though they were stale. The wire-drawn were close to the undrawn, while the Boston-drawn were distinctly lower in grade and sometimes were not edible. The full-drawn fowls at the end of the marketing were not only in the worst condition, but only occasionally were they fit for food."

The fact is, the more we cut open the fowl, the more we let in the taint and agencies of decay. Nature has sealed the bird up better than we can do it. Let Nature's handiwork alone, except to clean the outside. This seems to be the lesson.

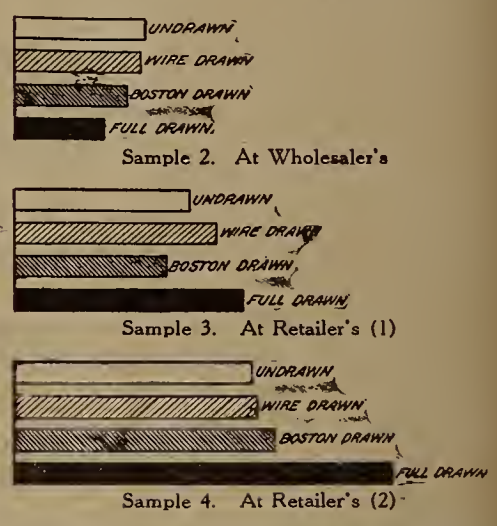



Fig. 2. Changes in ammoniacal nitrogen in flesh, comparing four methods of dressing

# From Department Store to Farm

## Energy Combined With Brains Can Win Success Anywhere—By A. W. Armstrong

When I announced my intention of giving up my position as advertising manager in a remarkably progressive and successful city department-store in order to become a farmer, the comments of my friends were many and various.

My city acquaintances congratulated me. Secretly, no doubt, they thought I had failed to make good with the "boss." Be that as it may, I am sure that many of them sincerely envied me. The opportunity of getting away from the nerve-racking, toilsome grind of city life is longed for by thousands.

My country friends took just the opposite view to that of the city dwellers. They agreed among themselves that I was a fool. How could a man be anything else to think of giving up a soft job in the city, surrounded by delights and luxuries (not to mention a salary of $1,800 a year or better), and coming to live on a farm? Of course, they all told me they hoped I would do well and that my health would improve.

### City Life Was Enjoyable

As a matter of fact, I enjoyed my city life immensely. I enjoyed the business in which I was engaged. I was always slim and what my boyhood friends used to call "skinny," but I have never had a serious illness in my life. I took to department-store life like a duck to water. The excitement and incessant activity just suited my nervous make-up. Moreover, I was fond of work and willing to do a large amount of it at any and all hours. This latter asset went ahead of all others I possessed in the consideration of the "boss." If there is any one thing above another which a department-store proprietor likes in a man, aside from salesmanship, it is willing industry. This applies equally as well to any other occupation. Then, if a man is able to mix brains with his industry, he will make a good record anywhere.

### Slip-Shod Work Never Pays

And right here we have a chance to drop down good and heavy on the thousands of farm boys who are this minute doing slip-shod, thoughtless work on the farm and looking with far-off, dreamy eyes toward the great city where they intend to rise to fame and fortune some time in the great, dizzy future.

Let me tell you something, boys. If you have the stuff in you to "make good" in the city, you can more than "make good" in the country. Put the same kind of industry and the same quality of brains into your farm work that is necessary for real success in the city, and you will live happier, healthier and longer in the country than in the city, and have more time for enjoyment of leisure and God's fresh air and sunshine than you could in the city.

The average country boy sees a great deal of drudgery and very little pleasure in life on the farm. The average farmer is too blindly selfish to see that it would be an immense advantage to himself if he would make his boys his partners and give them an interest in his business. They don't do it, and the boy looks to the city. His idea of a "good time in life" leads him to the city.

### The Vision and the Reality

There are thousands of country boys whose idea of successful living is just to have a job in the city with a few dollars over expenses each week—just enough to "set 'em up" with the boys after working-hours or to take Beatrice or Genevieve to the theater once in a while. Even this latter is a hazy vision, for the main thing in mind is just to get to the city. "Leave it to me to have a good time when I get there," think they.

And there we find them, street-car men, teamsters, policemen, bookkeepers, clerks—every city establishment of consequence has its country "graduates." And the city with its busy, exciting life keeps them, for comparatively few escape from the enchantments of paved streets; electric lights; busy, hurrying throngs; clanging bells; whizzing motors; dime theaters, and other delectable attractions foreign to the old days on the farm.

### He Is Ashamed to Go Back

The farmer boy who comes into the city haphazard, without training in any city vocation, is nearly always "up against it" for a few days until he gets a "job." Being green to city ways, it takes him some time to "catch on," and he has the experience of getting fired a few times before he sticks. Eventually, he fits in somewhere; becomes a human cog in some machine; gets his ten, fifteen or twenty dollars a week, and tries to make himself believe he is happy and contented.

At first this raw recruit from the farm cannot see a bale of hay without getting homesick, and he always has a secret longing to get back where he can dig in the earth, plant things and see them grow. But he told the folks when he left that he was gone for good, and he is ashamed to go back.

Of course, there are a lot of country boys who go to the bad in the city. The saloon gets them, the gaming-table and the fast women of the town. Most of these are boys with wrong principles to start with.

Many country-bred boys are thrifty and out of their earnings are able, in time, to

[CONCLUDED ON PAGE 7]

## *From Department Store to Farm*

[CONTINUED FROM PAGE 6]

own a suburban cottage and work off a little of the longing for country life in a small back lot. Minutes, few and precious, are spent here, for three quarters of an hour's ride on the car before and after work leaves little time for delving in the soil.

But you ask, "Do not some country boys achieve remarkable successes in the city?" Yes, sir; and this brings me back to my former assertion that the same brains that made them successful city men would have made them successful, remarkably successful, farmers. And, NOTICE, about the first thing one of these successful city farmer-boys does when he has achieved success is to buy a farm, and nearly always he proves before he dies that brain, not brawn, makes the successful farmer.

### Country Opportunities are Greatest

And so, while thousands of misguided country youths will continue to crowd into the cities, science, education, common sense, as well as sentiment, and above all the constantly increasing opportunities to make money, will draw brainy men to, and keep brainy men in, the country. The farm is coming into its own and the influence of the farmer is felt in society with greater weight than ever before.

Although I enjoyed city life, I saw an opportunity in the country which I believed outweighed every city advantage. In company with a young machinist, a country-bred boy tired of the city, I leased a little more than a year ago 855 acres of land in Washington State. We secured a long-term lease with an opportunity to purchase at a reasonable figure. The tract included what seemed to us an attractive item—fifteen acres of full-bearing peach and pear trees, besides forty acres more which could be put into orchard.

All the rest of the land was bunch-grass prairie and rocky bluffs. Not more than 350 acres tillable.

We had to buy horses and wagons and needed implements. We were green at the farming business, and we made some mistakes, but we were good students. One thing we bought which our neighbors looked on as needless and very extravagant for beginners. That was a two-horsepower gasolene engine. But we found that our orchard was somewhat infected with San José scale, and, as we intend to have a much larger orchard soon, we bought this as a nucleus to our spraying operations. We used it to good advantage last year, and it is good for many more years' service.

We plowed some of the prairie land and demonstrated to our own satisfaction and to the surprise of our neighbors that good potatoes can be raised on it in the driest season without irrigation.

### Our Wives Enjoy Country Life

Last year was a great year for peaches in Washington. The crop was immense, and that meant also a glutted market. It was our first year in business, and we had no old customers as a basis on which to build up a market for our products. Early in the season we got busy with our typewriter and wrote personal letters to many grocerymen in the small towns tributary to our location, and we succeeded in placing our crop at a price which averaged as good and I think a little better than most of the peach-growers in the state.

We worked and planned and used every tip we could get. We pumped our neighbors and read the best farm papers. We sought in every way to gain the knowledge we needed to make even our first year on the farm a success.

Looking back now, we can see where we could have done better. We see several hundred dollars lost through leaks, and some ways in which we could have realized more profit. Our balance-sheet for the year shows a gain of $1,800. That is more than both of us could have saved from our salaries in the city.

Next year we ought to do better. We have plowed forty acres of the prairie land. We have planted 3,500 young trees. We shall have in addition to our orchard twenty acres of cantaloupes and two acres of tomatoes.

We lack some conveniences of the city, but these will soon be ours right here on the farm. We have the rural telephone, which brings us in immediate touch with not only our own county, but with all the towns in eastern Washington. We have a daily mail. Our neighbors are intelligent and progressive. They appreciate our society. Our wives enjoy country life. We see monetary success ahead. Better than that, we have achieved independence. We have no regrets for having exchanged the department-store for the farm.

---

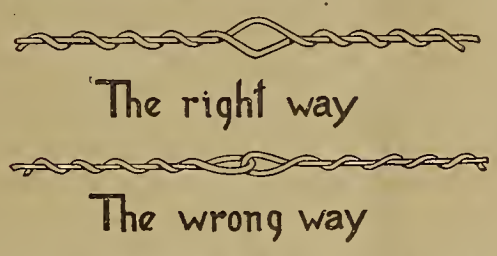
It is tough on the farmer who has bred some fine mouse-hunting cats to have some hunter or neighbor kill them out of pure cussedness. There should be a heavy penalty for such acts.

In nine out of every ten households the farm-wife gets less real vacation than the horses do after the rush work is over. Is your wife one of the nine cases?

# Farm Notes

## Correct Way to Splice Wire

MAKING a loop at one end of a wire and running another wire through the loop, bending it back and twisting around itself is the wrong way of splicing. The right way is to lap the wires, hold in the center with pincers and twist around each other. This is the regular telephone splice.




H. E. WARRICK.

## Auto Suggestions

I.

OFTEN on the road it is found that a loss of compression is taking place past the copper washer beneath the spark-plug flange, and that a spare washer is not available. An excellent temporary substitute can be made by cutting a piece of copper wire one sixteenth inch thick to the right length and bending it around in a circle so that the ends overlap. Then give each of the overlapping ends a tap with a hammer to reduce the thickness to about one half, so that they fit together fairly.

II.

Here is a way to relieve a band brake: Remove the old lining, which is generally fastened in place with rivets, and replace by another with new rivets. See that the band has an even curvature, either the same diameter or slightly larger than that of the drum.

Copper rivets are better than those of harder material such as rivet iron. The lining should be countersunk for the rivet heads, so that they will not run against the brake-drum. The drum is apt to be cut by a rivet which rubs against it, especially if the rivet is of hard material.

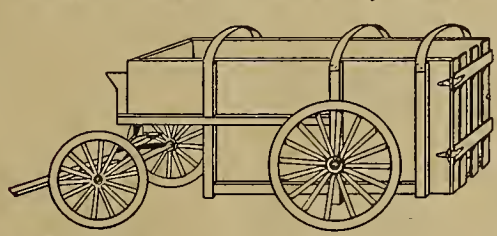
III.

What materials are suitable for brake linings? Woven cotton belting (cotton web), woven asbestos with a wire gauze woven in the asbestos, leather, wood fiber, etc. Copper and brass are satisfactory under some conditions, more especially when the brake is lubricated. CHESTER A. GONVIEA.

## The Useful "Jigger Wagon"

I WILL describe briefly a useful wagon for hauling any kind of stock, truck or produce. In some parts of the country it is known as a "jigger wagon." Any farmer and a blacksmith can build one.

The axle for the rear wheels is dropped fourteen inches from the hub by means of a right angle. This makes it a low-down wagon, easy to load. There is plenty of room in front for the front wheels to cramp under, while turning around. The arches on top are braces to hold sides together and are made of iron. The illustration shows the wagon complete. H. N. KERR.



## Some Fertilizer Figures

WHAT seems to be a favorite fertilizer here in West Virginia, judging from the quantity sold, shows an analysis of eight per cent. phosphoric acid and five per cent. potash. It usually sells at twenty-two dollars per ton at retail at our railroad station. A fourteen per cent. available phosphoric acid goods sells at eighteen dollars per ton. The phosphate and potash mixture gives us one hundred and sixty pounds of phosphoric acid and one hundred pounds of potash per ton; two hundred and sixty pounds of plant-food per ton in all. The fourteen per cent. goods gives two hundred and eighty pounds of plant-food per ton. On a commercial basis the cheaper goods show a value of one dollar per ton greater than the higher-priced goods. This allows a margin of five dollars per ton for mixing the goods.

If we should leave off two hundred pounds of the acid phosphate in a ton of goods, we would take out twenty-eight pounds of phosphoric acid; then if we should mix two hundred pounds of sulphate of potash with the eighteen hundred pounds of acid phosphate, we would have a ton of fertilizer containing two hundred and fifty-two pounds of available phosphoric acid and one hundred pounds of potash. It would contain three hundred and fifty-two pounds of plant-food in all, worth commercially $17.60 or $4.60 more than the goods with eight per cent. phosphoric acid and five per cent. potash.

Now we will look into the cost of the mixture at our railroad station.

| | |
|---|---|
| 1,800 pounds acid phosphate | $16.20 |
| 200 pounds sulphate of potash | 5.00 |
| | $21.20 |

This is nearly one dollar less than the eight-five goods cost us at our station. This is not all. It costs from thirty to thirty-five cents per hundred pounds to get the fertilizer from the railroad station to the farm and the more concentrated the fertilizer is, the more economical it is to the purchaser, and our fertilizers cost enough at best. Would it not be much more economical to purchase such goods separately and mix at home?

A. J. LEGG.

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There are clean feeders who do not waste a shred of fodder or hay; and there are dirty feeders who string hay all the way from barn to feed rack to be trampled under foot. Which are you?

Buying old engines and boilers that have been used long, or stood out in the cold and weather unprotected, is very risky, for they may let go at any time under strong pressure. Farmers are too apt to incur risk in this direction. Better pay more, and buy new, tested ones and be safe. C. E. D.

## The Latest Agricultural Reading

**Home Waterworks,** by Carleton J. Lynde, tells why water should be on tap in the country home and gives the most approved water systems and the conditions to which they are suited. Standard types of pumps, windmills, engines and supply-tanks are explained and illustrated. Pages, 255; price, 75 cents; Sturgis & Walton, New York City.

**Foods and their Adulteration,** by Dr. H. W. Wiley, chief chemist of the United States Department of Agriculture, has just appeared in its second edition including one hundred pages of new material with eleven colored plates and eighty-seven other illustrations. Doctor Wiley's book does much to enlighten the mind of the public on the subject of proper food and how to detect adulteration. Pages, 641; price, $4.00, cloth. P. Blakiston's Son & Company, Philadelphia, Pennsylvania.

**The Fruit-Grower's Guide-Book,** by E. H. Favor, is full of facts on all phases of fruit production, packing and marketing. It is broad in its scope, and at the same time definite enough in its statements to make it particularly valuable to beginners in commercial fruit-growing. Orchard heating, packing, home canning and other new developments are well handled. The illustrations are apt and informing. Pages, 285; price, $1.00; published by The Fruit-Grower, S. Joseph, Missouri.

**Neighborhood Entertainments,** by Renee B. Stern, gives detailed suggestions for organizing local improvement associations, young people's clubs and women's clubs, with rules for conducting meetings and hints on subjects for discussion. In another division of the book are found detailed directions for preparing and managing amateur entertainments of all sorts. The book is designed primarily to meet country and village conditions. Pages, 287; price, 75 cents; Sturgis and Walton, 31 East 27th Street, New York City.

**The Country Life Movement,** by L. H. Bailey, chairman of the Country Life Commission, discusses the great problems of the farmer of to-day—labor, the farm-to-city movement, the middleman question and the development of community spirit in country neighborhoods. It is written not with the view of proposing detailed solutions, but of illuminating those problems and making clear their relations to the national problems all Americans, in city and farm, are facing to-day, a book to stimulate one's thinker. Pages, 220; price, $1.25; The Macmillan Company, 66 Fifth Avenue, New York City.

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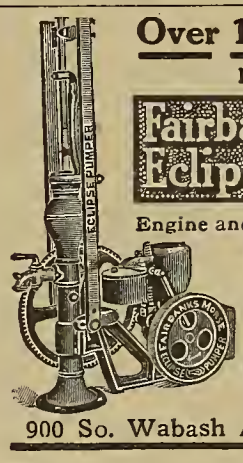

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saving half the post expense, and still have a stronger, more thoroughly stock proof fence, if you use the

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# Fruit-Growing

## Success and the Keys to it

THE West is known to almost every man, woman and child in the East as the land of the large red apple. This is particularly true of the Pacific Northwest, for its fame as a fruit-growing section has been heralded to the uttermost parts of the United States. The magnificent displays at the fairs at Chicago, Buffalo and St. Louis won the admiration of all. With the memories of these achievements the traveler enters this well-known section. He is filled with pleasant anticipations, for he is to see the splendid orchards that produce the fruit, which on account of its size and color brings such fancy prices.

To reverse the situation: What has the East to offer the fruit-grower or fruit-lover who for the first time is to view the endless region east of the Mississippi River? Has the fame of certain fruit sections in the East been heralded to the uttermost parts of the United States? Emphatically not. The traveler knows very little concerning the fruit industry in the East.

### Importance of Good Growth the First Year

However, if certain points discussed in this article are adhered to, a bright future presents itself to the man entering the fruit industry in the East.

After planting the trees, the following points are very essential: Stimulate a healthy, thrifty growth the first year. This may be done by practising intensive cultivation throughout the summer. In fact, if the tree makes a good strong growth the first year, much has been accomplished in the growing of fancy fruit.

Prune systematically from the first. Train the tree in such a way that the fruit may derive the greatest amount of sunlight. The demands of the American people are for a highly colored apple, be it a Jonathan, Spitzenburg or Ben Davis.

Spray incessantly and spray repeatedly for clean fruit. To produce fancy fruit, the grower must be vigilant, for on every hand there are scores of fungus and insect diseases. Remember always that fancy fruits are those that are uniform in size and color, free from blemishes and imperfections of any kind. Therefore, it behooves the grower to become familiar with the latest and best methods of combating these troublesome pests. This information may be secured free, by applying to state agricultural experiment stations and to the Department of Agriculture at Washington.

Thin repeatedly, if necessary. Do not allow the tree to carry too many apples. Thin down to one apple to a spur. It will pay. Small apples are a drug on the market.

It behooves the grower to become familiar with the latest methods of putting up fruit in order to dispose of it to the best advantage. One cannot market fancy fruit in barrels and expect to derive the greatest returns. One reason is that fancy fruit cannot be shown to the best advantage in barrels. Another reason is the people have been stung too many times with barreled fruit. The tendency with some unscrupulous orchardists is to work the inferior apples to the center of the barrel. To regain the confidence of the people, a new system must be inaugurated.

The Western fruit-grower now leads in putting his fruit on the market in attractive packages. The East must adopt this box in order to show the fruit to the best advantage. The box presents several points of merit:

1. It is convenient in size.
2. It is neat and attractive.
3. It is convenient for shipping in car-load lots.

Once a reputation is established no difficulty will be experienced in attracting buyers. Fruit should be grown in car-load lots. If this cannot be done by individuals, the growers should band together and perfect a fruit organization. The Western growers had to resort to this method. In the Hood River Valley of Oregon, for instance, the necessity of uniformity in grading and packing was so apparent, if the growers were to establish a reputation for themselves and get top prices, that nearly every grower in the territory subscribed for stock when the association was perfected.

If you have something good, do not be afraid to let the world know of it. Advertise continually. This has done more to develop the Pacific Northwest than almost any other one thing. Eastern orchardists and fruit-growers' associations can well follow suit in this, for there is no doubt that it pays. The returns that come from the advertising placed by the Westerners are a standing testimonial to the soundness of that policy.

C. C. VINCENT.

## A Checker-Board Orchard

NOTICING that several different systems of planting trees in the orchard have been described in FARM AND FIRESIDE, I wish to mention my checker-board orchard which has been very successful here in New Jersey.

This orchard occupies space that would otherwise be wasted. It furnishes available

shade when I am working in almost any part of the farm, and as most of the trees are along the roadway to the different fields, the fruit can be easily gathered and hauled away. Of course, it has some disadvantages as to ease of spraying and cultivation, but for a small farm this plan works very nicely when the fields must be used for other crops. Here is my plan of a ninety-acre farm, which grows lots of apples and good ones:

The farm is divided into nine ten-acre fields, and the trees are planted along the sides of the fields. The trees are from thirty-five to forty feet apart, which makes it possible to grow about four hundred on the three linear miles thus provided. The trees grow and bear nicely, and I am not only well pleased with the system myself, but recommend it to others who wish to raise general farm crops and also grow fruit on a limited area.

THOS. A. APPLEGATE.

## The New Apple Orchard

### Part II.

HAVING given in a previous article (February 10th) consideration of setting the orchard, varieties, etc., we must now study how to handle this orchard, not only for the best interest of the trees, but from a commercial standpoint as well.

### Potatoes Guarantee Cultivation

I believe one of the best methods in cropping the orchard the first year after planting, so as to get the use of the land, is to put in early potatoes. This will guarantee good cultivation. When the potato crop has been gathered, sow buckwheat. This will keep down weed-seeds and leave on a good winter covering. The buckwheat should be cut quite high. The potatoes should also be fertilized enough to raise both crops, so as not to draw much plant-food from the trees. Unless the ground has previously been cropped to death, the trees will get all the food they need the first year. A little bone-meal may be used as a starter when planting the trees. The second year after planting we might recommend planting to corn. Then, following the last cultivation, sow to crimson clover, which will make a good cover crop and can be plowed under the next spring as green manure. This will keep the land up, not draw much plant-food from the trees and bring in some returns while waiting for fruitage. Of course, enough fertilizing must be done to raise the corn crop, as well as to get the clover-seed to catch properly.

I believe in cultivating orchard ground. The first purpose of tillage is to set free plant-food by increasing the chemical activities in the soil. Also, the soil by being made finer presents greater surface to the roots and thus increases the area from which the roots can absorb nutriment.

Secondly, the surface of the soil is kept in a mulch so that it holds all the rain that falls. If the surface remains undisturbed, on the other hand, the moisture from below readily passes to the surface and is lost.

Thirdly, thorough tillage has a tendency to cause deeper rooting of the plants. The surface of the soil is made drier by tillage during the early part of the season than it would otherwise be; hence the roots go deeper, where the soil is moist, an obvious advantage during drought.

### Tillage Should Begin Early

The ideal tillage of the apple orchard then, is that which begins as early in the season as the soil will permit, while there is still an abundance of moisture in it, and continues through the growing season of the plant. The aim should be to keep the surface, to a depth of two or three inches, as light and loose as possible. A fine dust mulch is of great importance, especially in hot weather.

We will suppose that after first year's growth the branches were well cut back, as mentioned in my first article. Then, as soon as growth commences, numerous sprouts or shoots will start on each limb. All of these sprouts should be rubbed off, except the one nearest the end of the limb. When pruning do not forget that the way the bud points is the direction the future limb will grow; so if you want the limb to grow outward prune so as to leave the last bud on the lower side; if you desire an upward growth leave the last bud on top.

Always remember that pruning calls for common sense, and that the object is to form a well-shaped tree, to allow the sun and air to get at the fruit and to check a too rapid wood growth, thereby throwing the sap into fruit-buds. If the tree is growing too tall, cut it back; if limbs grow inward, thin them out in such a manner that the remaining branches will make an outward growth, and the sun and air will be let in; if the branches drop too much and give evidence of eventually preventing movement under the trees, train so that the future growth will be upward.

SYLVANUS VAN AKEN.

## Slope for Orchard Irrigation

I AM asked what is the most desirable slope for irrigating in an orchard.

When irrigation is practised in the orchard, the proper slope depends largely upon the nature of the soil. To insure an even distribution of water over the land, when the furrow system is used, a grade of two inches in one hundred feet, for the ordinary loamy soils, is necessary. Heavy adobe or clayey soils require as much as three to four inches in one hundred feet. In case the fall is greater than six or ten inches in one hundred feet, the trees may be planted in such a way as to decrease the slope of the furrow.

But here is a note of warning: Where water is available for irrigation purposes, in the orchard, the tendency is to make too frequent applications throughout the summer. This procedure causes the tree to make too rank a growth, usually at a sacrifice to fruit production. The ultimate result of too much water is winter-killing. The only practical solution to this problem is to lessen the number of applications and increase the number of cultivations. There is nothing better than a good dust mulch to conserve moisture.

C. C. VINCENT.

## Edibility of Garden-Huckleberry

A RHODE ISLAND reader sends a spray and fruit of what he calls garden-huckleberry, and is shy about eating it because of its relation to the night-shade family. The garden-huckleberry is a relative of this much dreaded family of plants, as are also the bellberry, blueberry, cranberry and notorious "wonderberry" of Burbank fame. The tomato and potato also hark back to the same parental stock, but the deadly characteristics of these plants have become practically eliminated by domestication and cultivation so that the poisonous properties are seldom developed, except when unusual conditions affect their growth.

B. F. W. T.

## Browse for the Hogs

TO STOP hogs from peeling apple-trees, get in the top and cut or prune out a few limbs so that the hogs can get browse. That is all they are after, and they will quit, as they did for me.

SAMUEL STUBBERFIELD.

# GARDENING
By T. Greiner

## Substitutes for Asparagus

Years ago, when we did not have asparagus in our gardens, we made use of various substitutes. A good one is hop sprouts. They come up from the root crown about as numerously as asparagus sprouts. They are rather slim, but when cooked like asparagus by a good cook, they are quite palatable. We have also used a certain kind of lettuce (Lactuca angustana) advertised for such purpose by European seedsmen. The leaf-stems of this were cooked like asparagus. It was all right, too, but not equal to the true asparagus. Then we tried Swiss chard, the wide leaf-stems and midribs of which are also recommended and will do when you have nothing else.

The hop sprouts are available during the asparagus season. The other substitutes, of course, are somewhat later. This search for substitutes, however, shows in itself how valuable and desirable a vegetable we have in asparagus.

## Turnip-Lovers Love Kohlrabi

I am not an admirer of turnip flavor, though many persons are. There is not much objection to kohlrabi, however. It is milder in flavor than turnip; it is tenderer, while young; it comes earlier, and it is very easily grown.

My advice is to sow a little row of it, for you have plenty of time yet to do it. Thin it to stand a few inches apart in the row, no need of transplanting it. In preparing kohlrabi for the table, use the globe-shaped enlargement above the root, the base of the leaf-stalks. This is peeled and cooked like turnips or cauliflower. A good cook can make it very palatable. White Vienna is the variety mostly used, and most suitable for these purposes.

## Two Months of Green Peas

I like green peas so well that I want several big messes every week for at least two months, and perhaps longer. That means planting several varieties, and planting for succession. I put in a little row or two every week or ten days, so we are never out of green peas during the entire season. Alaska comes first. Then we have Dwarf Champion and Thomas Laxton, and perhaps others; in fact, there is quite a list of good peas.

Some gardeners will have good success with the very dwarf American Wonder, and with the very tall Champion of England. I prefer the sorts that we can grow without giving support, among them Surprise, Abundance, Everbearing, Telephone and Stratagem.

## Green Onions After a Hard Winter

With apologies to my friend Beaulieu of "Hardy White Winter" onion fame, I have to report that never before did my White Portugal or Silverskin onions, grown from seed sown August 1st, go into the winter in better shape than in 1910, and never did they come out poorer in spring than in 1911. Where not well mulched, they winter-killed quite badly. Heretofore, in about ten years, I have never lost an appreciable proportion of the plants of this variety by winter-killing. This last winter was surely a hard one on any garden vegetable that is only fairly, but not entirely winter-hardy.

My spinach, unprotected, was all killed out. Parsnips suffered severely by heaving and by softening of the upper part of the crowns. No wonder the Portugal onions suffered. At the same time, Vaugirard (a French variety, seed obtained from two different American seedsmen) comes out all right. It was planted in the same patch as the Portugal, and treated exactly like it. Not a plant seems to be hurt. I shall try the Portugal again, as the chances of its getting through the winter all right seem to be nine to one in its favor, yet I shall enlarge my plantings of the Vaugirard after this.

## The Time to Plant Limas

We all like Lima beans, and we want them as early as we can get them. But one should not be too fast about planting them. The soil must be warm, else the beans will rot in the ground. After they are up once, they can stand a cold spell fairly well. I plant them with the hoe like any other beans.

Some stick them singly into the ground, eye down. They say the beans are more liable to come up. Whatever there may be in this claim, it is only a matter of using a little more seed with my way of planting. I usually save my own seed and am not so particular about it. If you want your Limas extra early, start the plants in thumb pots or paper pots or boxes. They transplant easily, and you can have a few messes a week or two earlier than otherwise.

## Save Your Poultry-Manure

I have several queries about hen-droppings. One reader wants to know whether they can be applied advantageously to growing crops. Surely they can, and often they give big returns. Save it, every bit of it, and save it carefully. A little superphosphate strewed over the accumulations under the roosts, or over the heaps under shelter anywhere, will save the ammonia in it and make it all the more effective. If you have no superphosphate on hand, use dry muck or loam instead, or even sifted coal-ashes. Mix it well and have it as fine as possible. Whenever you notice that one of your garden crops is in need of a little extra stimulation, put a quantity of the hen-droppings, held in reserve for this purpose, around the plants, or on both sides of the row, and afterward work it in with cultivator and hoe. In this way I often help my Lima beans, egg-plants, peppers, tomatoes, cucumber, melon and squash vines along at a wonderful rate, and produce big yields.

I now have several barrels of hen-droppings on hand that are intended for celery. A lot of this is added to the old well-rotted stable manure which is filled in the furrows at the time these are prepared for setting celery-plants. The manure is well mixed with the soil, the furrow filled in nearly level with the surrounding ground, and the plants, in single or double row, set along right where these manures will do them the most good. Some celery-growers apply from one to two tons of high-grade fertilizer per acre (an expense of forty to eighty dollars). With the free but discreet use of hen-droppings, you can raise just as good crops.

## Sawdust as Fertilizer

We have used a considerable amount of sawdust and find it a valuable addition to the soil after it has served its use for bedding. A quantity was hauled on some red knolls that would not hold grass. The saw-dust was covered lightly with manure and hayseed from the mangers. These knolls now show a green surface and I think that in a few years' time they will entirely lose the bare aspect so disheartening to a farmer.

D. B. Phillips.

## To Grow Big Watermelons

Plow deeply as usual; thoroughly prepare soil; then plow deep furrows eight to twelve feet apart, according to variety. Run a shovel plow once or twice in bottom of furrows, thus partly filling them. Next apply rotten manure in furrow, about one fourth of a bushel to every yard if supply admits; mix this with soil by means of double-shovel plow or similar tool. Then bed on this furrow and plant very early.

In about ten days plant again, repeating about every ten days until sure of a stand. Fight beetles with tobacco-dust, turpentine and lime. I prefer tobacco-dust, very finely powdered. The ridge will furnish a safeguard against both wet and dry weather. As season advances, work more soil toward row, finally leaving a middle furrow midway between rows. The ditch insures good drainage and the ridge of deep, well-prepared soil insures moisture. By the above method I grew hundreds of melons weighing from twenty-five to forty pounds on black prairie soil, and three of my largest which ripened at the same time weighed thirty-nine, forty-six and fifty-five pounds respectively.

Jerry T. Williams.

## Dry Rot in Tomatoes

A reader near Waltham, Massachusetts, has trouble with a dry rot affecting his tomatoes when about to ripen. There are several fungus diseases responsible for tomatoes rotting, but plant experts have not reached the bottom facts in regard to the identity of the bacteria and their control.

The dry rot is generally termed anthracnose or blossom rot, and has been treated, with some success, with Bordeaux mixture made in the proportion of four pounds of copper sulphate, four pounds of quicklime and fifty gallons of water. The first application should be made when the fruits are first forming, another three weeks later and still another three weeks afterward. A rotation which includes at least two years with grass and clover will be a great help in preventing fungus diseases. B. F. W. T.

## The Time to Plant Dahlias

What is wrong with my dahlias? They grow nice in summer and bud, but don't come out. The buds will drop off. McClure, Ohio.

The dahlias were planted too early. Years of experience and countless failures on the part of growers have demonstrated that the dahlia will not succeed in our climate if allowed to make abundant growth before the period of midsummer drought. Plants in vigorous growth passing into this hot, dry weather are suddenly checked in development, and by various symptoms show an unhealthy condition. The shoots become stunted and twisted, mildew frequently attacks the leaves, and the flower-buds, instead of expanding, droop, turn black and finally fall off.

By planting the tubers about the first of July these troubles can be averted, and flowers of the finest kind are produced in the late-fall, when the garden is more or less bare of other bloom. The first flowers should appear about the middle of August, and the blossoming be profuse from then till frost. The tubers will sprout in the spring and suggest the necessity of planting at once, but don't do it. Merely remove the tubers from the cellar to some partly shaded spot, and let them lie, at least till the middle of June. The plants will then grow continuously from the start, and cause no annoyance by dropping their buds. L. B. Judson.

Every really successful farmer is running a "demonstration farm," and is truly a benefactor to his community.

## Personalities of the Vegetable Garden

Have you ever walked among the throngs of a city to learn to read with increasing skill, from the faces you meet, the characters that lie behind them. The frequenter of a garden-plot feels even more keenly the distinctions in vegetable character expressed in the plants that crowd about him.

Observing a garden soon gives you the belief that "personality" is not an exaggerated term to apply to the temperament of each of the prolific plants that here stand erect, climb aloft or waywardly run along the ground. On this side see the dill lift her yellow flowers.

Watch this dainty society maiden, tiptoeing rather haughtily among the more plebeian denizens of the garden, holding a frail silk parasol over her head, and showing ankles of patrician slenderness below her fluttering skirts. Near enough to keep a cautious eye upon her, as a chaperon, stands the rotund and dowager-like form of the kohlrabi, or "turnip cabbage." Its stem swells above the ground into the edible bulb, of remarkable smoothness of skin, while at symmetrical intervals from the sides of the flattened sphere there start globe-like bases of stems bearing sage-green leaves above, in fancied resemblance to ruffled plumes of a woman's fashionable hat.

Down on the other side the pepper-plants are grouped like gay gallants in courtly costumes of dark green leaves, that show among their abundant masses the gorgeous scarlet of the ripened peppers like glossy satin.

One of the plants, however, must be a miser in disguise, for I find concealed under the leafery a misshapen green pepper strangely like a muscular hand clenched upon a roll of bank-notes. And now what is this cucumber vine, running heedlessly across ridges and furrows, but the frolicking boy of the garden, wishing he had a voice to shout for delight in his truancy? Look at his pockets as he races by.

You will find them bulging with green treasures that your imagination will find it easy to recognize as candies, tops and knives. Of what different character is the next plant, that stands apart from the others as though unable to feel at home, the okra with the West Indian or negro name of "gumbo."

Of all the vegetables he is "Chantecler" with these long pods turned up on his lank legs like a cock's spurs. The tall forms that rise above the other growths at the garden's border with wayward personality all their own are only those of the familiar "shell bean" twining about their poles.

Unusually active to-day, they seem to leave all commonplace associations behind them, and troop past as gaily as a bevy of girls. The summer-squash vines seem the gipsies of the garden, never content unless they can roam far afield to pitch the spacious green tents of their broad leaves, beneath which the flaring yellow blossoms shine like the flames of camp-fires, until they afterward fall withered from the stalks.

Does not the artichoke in his corner of the plot have the aspect of a foreigner, trying to learn the customs of the New England field, but his thistle-like, divided leaves still retain a "Frenchy," unfamiliar look?

On this account in agreeable contrast is the homely, "down East" sociability of the lettuces, turnip and beet tops, potato and melon vines, that are settled down on the soil all about, as comfortably as the farmer and his family in well-used chairs and snug chimney-corners at the end of an arduous day. But who knows that while I thought the reading of character was all on my side, the plants were not studying me and welcoming me to their family circle with a friendly "How do you do?" Eliot White.


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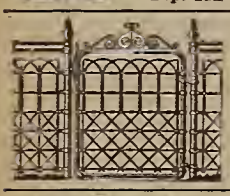
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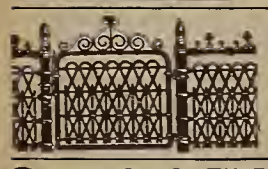
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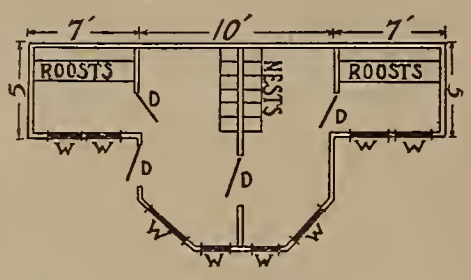
# Poultry-Raising

## Profitable Hennery on Small Scale

We began our poultry business on a small scale, having two small roosting-houses, with a partitioned scratching-shed between, and a good enclosed run. On August 1, 1909, we bought forty-five May-hatched Rhode Island Red chickens, twenty-five of which were pullets. We exchanged two of the cockerels with a neighbor, being careful that they were in no way related to our own, and sold the remaining males. The pullets began laying about




December 1st, and the sale of eggs, together with receipts from the cockerels, by January 1st paid for all the pullets' previous feed and themselves.

### Our Business for 1910

We have kept an accurate account of all receipts and expenditures. For the year 1910 we hatched in April thirty-five chickens under hens and bought fifty-two day-old incubator chickens from a dealer. We were exceptionally fortunate in having almost no sickness among them, only four dying and five more killed by some night prowler. The incubator chickens were brooded in fireless brooders made at home and made very satisfactory growth.

Of the chickens thus added to our flock, thirty-one were pullets. Cockerels, however, have a ready sale here, in northeastern Ohio, and they were not an unprofitable part of the year's business. We added another building during the year to house our young flock. The floor plan is shown in the sketch. The house has received much favorable comment from poultry-keepers hereabouts, especially the "bay window" of the scratching-shed, which admits sunshine all day. Both our buildings face south. They are four feet ten inches high in back and six feet in front. This pitch brings the front of scratching-shed to seven feet two inches. The partition through the shed is boarded three feet high, above which there is chicken wire to the roof. The windows in the roost-houses are two feet square, and those in the shed are three by two and one half feet. The windows are hung to swing inward, and opened wide on sunny days. In summer the windows are entirely removed.

### Feeding and Marketing

We feed as varied a ration as possible, and green food daily, sprouted oats, and cabbage hung high enough so the hens must jump to reach it. In the morning we give a hot mash of wheat-bran, corn-meal and oats, with meat-scraps and charcoal on alternate mornings, and into this is also mixed all table-scraps and cooked vegetables and fruit-parings from the kitchen. A feed of cracked corn and wheat is thrown into the litter of straw and leaves which is kept deep enough so the hens must scratch well to find it. At night a feed of cracked corn and oats is fed, as warm as we can handle it, in cold weather. A dry mash is kept in hoppers so they have free access to it at all times, also grit, charcoal and oyster-shell. Their drinking-water is warmed in cold weather.

There is a ready market here for all the eggs we can produce, even when the price is soaring, and when, in December, the price went up to sixty cents, we could have sold many more, and as the pullets were laying well, we had the full advantage of the high prices. Much of the year's profit was turned back into the business, and showed in our increased stock and buildings.

Following are our inventories at the beginning and end of the year:

| | |
|---|---|
| January 1, 1910, house and stock | $ 52.00 |
| January 1, 1911, house and stock | 166.75 |
| Gain | $114.75 |
| Receipts from eggs and cockerels | $204.46 |
| Expenses, including $65.20 cost of new house | 170.25 |
| Cash profit | $ 34.21 |
| Gain in stock | 114.75 |
| Total profit for year | $148.96 |

We value our hens at $1.00 each and pullets at $1.25. The profit on each of the twenty-five hens we started with was $5.95. These twenty-five hens laid during the year 4,357 eggs, and averaged better than 174.

And now, when we hear a neighbor say, "There is no money in hens," we feel like smiling a little, for we know better, and when the neighbors laugh at us, as they do, and say we take too much pains with our hens, we let them laugh, for we prove by our books it pays to take pains. The houses are kept clean, warm and well ventilated, with a good supply of fresh outside air, but no draughts, and the hens are not let out in rain or snow, or on the frozen ground, having ample scratching room in their dry sheds.

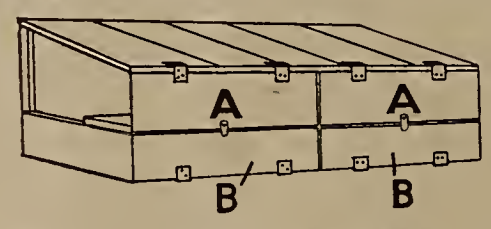
We had absolutely no experience when we began, but have found valuable hints and helps in Farm and Fireside, and also in one or two much-advertised poultry-books.

Chas. A. Jenks.

## Sanitary Nest-Box

This nest-box can be made any length desired, and should be fastened to the side of hen-house. It is ideal because it is dark as well as sanitary.

The upper doors (AA) are on hinges, and, when raised, lie back on top of nest, thus making it easy to gather eggs. The lower doors (BB) drop down, leaving the front




free from obstruction when necessary to clean out. Buttons fasten the doors together. The ends are boarded even with the top of lower side doors. A partition in the center supports the top and gives rigidity to the entire box.

In front of the row of nests is a four-inch board for the hens to walk on while going to or from their nests. The size of each individual nest is ten by sixteen inches, by ten inches deep. Mrs. M. J. Kain.

When the mother hens wean their chickens, see that all the lonesome little fellows do not crowd into one coop. Where crowding occurs, some of the weaker chicks are often smothered to death.

During warm weather change the material in the nest-boxes frequently. Clean wheat or oat straw makes the best nest-material. It should be cut into short lengths so that it will be smooth and comfortable for the hens.

## Country Women, Egg Prices and Congress

[continued from page 4]

The thing of first importance both to producer and to consumer is an understanding of the proper methods of handling eggs—proper methods on the farms, in the country stores, in transit, in cold storage, in the shop of the city retailer and in the homes of the consumers. Success in holding a part of the eggs of the surplus season to meet the demands of the deficit season is dependent upon proper handling at every point. It is safe to say that more bad eggs reach the kitchens of America from other causes than from too great a length of time in cold storage. Furthermore, many eggs that reach the kitchen in good condition are allowed to deteriorate in a warm room before the cook finds occasion to make use of them. There is responsibility all along the line.

The testimony before the Senate committee relative to foods held in cold storage was to the effect that eggs produced during hot weather will not, even under most favorable conditions, remain fit for use over three months, and that more often in less than a month they are unfit for human food. This is a reason for not storing eggs more than temporarily during the hot months, but it does not give basis for legislation against the storage of eggs in the cool months of spring to be kept over until the period of scarcity.

Chart III. shows the time of year eggs are stored by one big cold-storage concern in Chicago. When Charts II. and III. are compared, it becomes obvious that eggs are stored when there is a surplus on the market, and sold when the receipts are at a low ebb.

### Weather Influences are Unpredictable

The risk is great in the storing of eggs because of the fact that the whole supply must be gotten rid of before the increase in the supply of fresh eggs, or they may become almost a total loss. Note in Chart II. how the price of refrigerator eggs fell, in February, 1911, below the price which had been paid for them. The risk is much greater than it would otherwise be because the period of greatest scarcity is followed very closely and very abruptly by the period of maximum supply (Chart II.) and because of the fact that the time of this change is influenced by the weather and cannot be predicted.

Another aspect of the storage of eggs worthy of consideration is the relatively long period between the surplus period and the period of scarcity. Vegetables may be stored late in the fall for winter use, but eggs must be stored early in the spring and kept through all the hot months. Natural conditions determine the length of this period of storage. Any government regulation intended to improve the conditions of the egg-storing business should conform to this fact.

It is obvious that a law limiting the storage of eggs to three months ignores the conditions of nature which make storage desirable. The normal length of time from the beginning of the surplus period to the end of the scarcity period should be accepted as the maximum length of time to store eggs.

April is the month in which the maximum quantity of eggs is put in cold storage (Chart III.). The stored eggs are drawn upon whenever the supply of fresh eggs falls below the market demand. This means that even in August and September stored eggs are used, but the greatest demand comes in December, and the aim is to dispose of the whole supply by the end of January.

If, with proper care, eggs deteriorate so rapidly that those stored in April will be unwholesome in December and January, that would be adequate grounds for abolishing the cold storage of eggs so far as it relates to equalizing the supply of the surplus and deficit periods. If, however, by proper methods of handling at all stages from the hen to the consumer, eggs can be successfully kept from April until January, such storage will result in a great national economy.

Obviously the cold storage of eggs should not be legislated out of existence if proper knowledge and efficient control are all that are needed in order to avail the people of the United States of this economy without danger to the health of the consumers. *Legislation should follow and be based upon scientific investigations of the possibilities of cold storage. The examination of witnesses does not increase the sum total of knowledge.*

Government regulation which will require that stored eggs be sold for exactly what they are, will be of great benefit both to the producer and to the consumer. The time is ripe for such legislation.

### There is Economy in Coöperation

Without government regulation the winter-egg producers of a locality might be able to protect themselves against the unfair competition of stored eggs (the selling of stored eggs as fresh eggs) by stamping their eggs in such a manner as will enable the consumers to know what they are buying.

There are great possibilities in the coöperative selling of fresh eggs. There are many people who want fresh eggs the year around who are willing to pay high prices for eggs which can always be counted upon.

There is economy in coöperation. A large number of producers can advertise their product as cheaply as one. One telegraph message regarding market conditions in the city will serve twenty farmers almost as well as one. A common trade-mark used by all the coöperators, with a distinct letter or number for each producer in the company, will give the basis for establishing a "brand" of eggs, and give the facts necessary to locate the producer of a bad egg. If a bad egg should find its way to a consumer, the number would enable the coöperative company to locate its source.

The purpose of this study is to stimulate thought. The readers are asked to gather facts for themselves, and draw their own conclusions on this vital national question.


# $436.66 Net Profit Per Acre

## It Pays to Raise Cantaloupes in California

***T. Amagi and Peter Hovey had 22 acres of California land set out in cantaloupes.***

***Their joint profits were $9,599.92—a net return of $436.66 on each acre.***

***D. Weichman's track of 30 acres netted him $366.66 per acre.***

***R. H. Clark netted $2,300 from 9 acres.***

***C. H. Betzen $1,400 from 10 acres.***

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# Live Stock and Dairy

## Wisdom for Horse-Breeders

A READER on a Missouri farm has sent us several questions which are of such general interest to breeders that we publish them herewith, together with the answers prepared by Mr. David Buffum.

Our friend first asks for hints on the general principles of stallion management, and further inquires: "Is there any good book containing instructions for stallion and jack owners?" Mr. Buffum replies:

I do not know of any book of this kind. A general knowledge of horsemanship, however, is all that is needed, for a stallion is nothing but a horse, and he differs from a gelding only in so far as his character is influenced by his sex. This difference is fully met if common sense is used and the horse is—as all horses should be—so broken as to be under control.

He should be plentifully used, either by riding or driving on the road, or, if he is a draft stallion, for farm work. There is far less danger of his being used too much than there is of his rusting out in idleness in the stable. He should also be treated kindly, and severity never used unless it is really necessary. Many a stallion whose disposition was naturally good has been made ugly through needless severity.

He should be kept in good order always, but not inordinately fat. It should be remembered that the element that most nourishes the nervous system, on which the generative function largely depends, is phosphorus—hence, in the breeding season, he should have plenty of food containing this element, such as oats, barley or wheat, oats being best of the three. It is important that the stallion have abundant exercise, by riding, driving or farm-work, through the breeding-season as at all other times.

The second question refers to the difficulty of getting mares in foal and asks if there is any way to make this more certain; also what will prevent abortion.

The mare that is bred at, say, three years of age and every year thereafter usually becomes pregnant without much trouble. But with mares that have been allowed to reach their ninth or tenth year without having been bred, considerable difficulty is often experienced.

In a state of nature, where most animals breed regularly, they are seldom very fat and always have abundant exercise. A lesson should be learned from these facts and brood-mares kept in good order, but not fat, and given plenty of exercise on the road or on the farm.

But even with these conditions fulfilled, mares are more uncertain breeders than other of our domestic animals, a fact that is often exasperatingly disappointing if the stallion is at a distance. The most certain way to get mares in foal is to have one's own stallion, then watch the mares closely and never let them get by a period of heat without being bred. If this is followed up faithfully, the number of mares that "skip" will be greatly lessened.

The causes of abortion are generally very difficult to find. It varies with different years and different regions, being more frequent, I believe, on the richer lands of the West than here in New England. Its variations would lead one to believe that it is in some way connected with the feed. This assumption gives us very little to work on, but of these points at least I am certain. It is not wise to turn brood-mares into rye-pasture, to feed them "rye-hay" or bed them with rye-straw, a portion of which they almost always eat. It is also my opinion that the finer sorts of hay are better for brood-mares.

"At what age should colts and fillies be put into separate pastures?" After the first year of their lives it is better to keep them apart.

"What is the best age at which to castrate a colt?" One year.

"Can a jack be used to try or tease mares that are to be served by a stallion?"

I should strongly disapprove of using a jack for this purpose. The questions of prenatal influence and how much part mental impressions play in determining the character of the offspring are too large to be taken up here; but, as a general principle, I can at least say that a jack is not a fit associate for a mare that is to be bred to a male of her own kind.

## For Surer Pig-Production

THE main essential of a good boar is that he be a pig-getter. He may conform to all the requirements of type, stand up well on his toes and even win a championship at a fair, but he is of no use in a herd if he is unable to get pigs.

In growing a boar and in his subsequent care, his vigor and breeding ability should have first consideration. An excess of fat is undesirable in the extreme.

The number of services allowed at first and the consequent habits of breeding which he develops have much to do with his later efficiency. At first he should not be allowed more than one service a day. He soon learns that no more sows will be turned in to him, and his service is much more likely to be efficient. For similar reasons, it is a bad practice to allow the young boar, or any boar, to run with the sows. Not only are his services less sure, but his vigor is greatly reduced. The extra trouble of keeping the boar by himself is well paid for by his better condition. CLYDE A. WAUGH.

## Padding His Ribs

MOST horsemen have had experience with animals that will not put on fat, in spite of good care and apparent freedom from disease or organic trouble. This instance is described in a Massachusetts inquiry: "Twelve-year-old work-horse gets two quarts of mixed grain and one quart of bran, in the morning and at noon, and at night three quarts of bran in steamed mash, besides hay morning and night. He was a little out of condition when bought, so is given a teaspoonful of mixed sulphur, gentian and sulphate of iron three times a day in his feed. Teeth all right, but he won't put on fat."

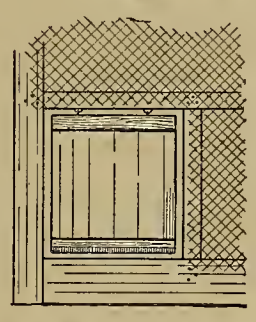
In cases of this sort the probability is that the horse needs grass, and it is doubtful whether he can be made to gain in flesh very much till he has had two or three months' run in a good pasture. If it is necessary to use him, the best way is to keep him up in the daytime and turn him out to pasture every night.

The best time to turn out, in the North, is from the middle of May till the middle of July, though he will do better to run out at night right through the summer.

If, on the other hand, the horse need not be used, give him no grain while he is out to pasture.

For horses down in flesh, before grass comes, I would suggest feeding some molasses along with the other grain. A quart of molasses, a quart of bran and a quart of corn-meal, every morning and night, with a few oats at noon, will put fat on such animals if anything will. Begin with a pint of molasses, or a little less, at a feed, and gradually work up to a quart. This ration is suggested on the assumption that the horse is used regularly. If he is idle in the barn, cut out the corn-meal and oats, and feed only molasses and bran, with plenty of hay. Bran is one of the best feeds for run-down horses. DAVID BUFFUM.

## Gate for Dog or Hog



THIS device fills an often-felt want when you keep chickens in an enclosed back door-yard, but wish to permit the dog to run in and out, without opening the gate for him.

Make a gate of smooth, light, thin boards set perpendicularly and nailed to cleats; bevel the upper side of the lower cleat, so that it will be smooth. Hang this gate at the top end with two pairs of fence staples to form the hinges. For a dog's use, the bottom of the gate should swing above a six or eight inch base-board. The gate should be a few inches narrower than the gateway, so that it can swing freely, out or in. My gate is twelve by eighteen inches. Five minutes' drilling will teach the dog how to use it.

A hog-gate can be made and hung in a similar manner, but should be of heavier material and of larger size, say two by three feet, and without a base-board under it. It will be found useful between a chicken-proof feed-floor and an outer yard; also, at entrance to the hog's sleeping-apartments, to keep cold winds out. J. R. CLARK.

We have observed, all of our life, that the farmer who "owls" around after night with a lantern, doing his chores, never makes any more than the man who quits work early enough to get his chores done and his supper eaten by a decent hour in the evening. Neither is this night-prowling conducive to a pleasant temper, good health, and a long, useful life.

It is a splendid habit to look carefully through the advertisements in FARM AND FIRESIDE and then write for samples and catalogues.

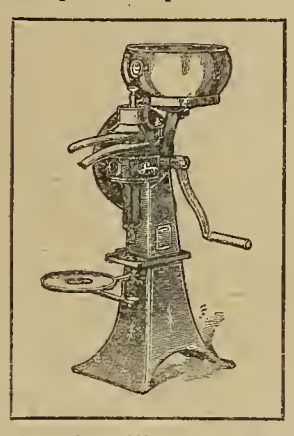
A very valuable fund of knowledge on new inventions and discoveries may thus be obtained. The late William E. Gladstone, England's Grand Old Man, used to say that he found much pleasure and profit in reading the advertisements in American publications. You would, also, for when a great inventor or manufacturer has found something that will contribute to the comfort or happiness of the home or farm he is anxious to tell you about it in his advertisements.

All those who use FARM AND FIRESIDE are reliable, too, for they belong to FARM AND FIRESIDE'S big family. In writing to them just say that you are a member and see how promptly and courteously they will reply.


# DE LAVAL Cream Separator

## SAVES ITS COST EVERY YEAR

Occasionally the intending buyer of a cream separator who has but a small amount of ready cash to invest is tempted to put his money into one of the so-called "cheap" machines which are being largely advertised.



Why pay your hard earned money for a "cheap" trashy machine when you can buy a reliable DE LAVAL upon such liberal terms that

**It will more than earn its cost while you are paying for it.**

When you buy a DE LAVAL you have positive assurance that your machine will be good for at least twenty years of service, during which time it will save every possible dollar for you and earn its original cost over and over again.

If you purchase the so called "cheap" separator you must pay cash in advance and then take the chance of the machine becoming worthless after a year or two of use, to say nothing of the cream it will waste while it does last,—all of which means that you have virtually thrown away the money invested in the cheap separator and wasted your time, labor and product in the bargain.

The DE LAVAL separator pays for itself. It runs easier, skims cleaner and lasts longer than any other cream separator.

***Be sure to see the local DE LAVAL agent and try a DE LAVAL before you buy any cream Separator.***

**THE DE LAVAL SEPARATOR CO.**

165-167 BROADWAY **NEW YORK** — 29 E. MADISON STREET **CHICAGO** — DRUMM & SACRAMENTO STS. **SAN FRANCISCO**

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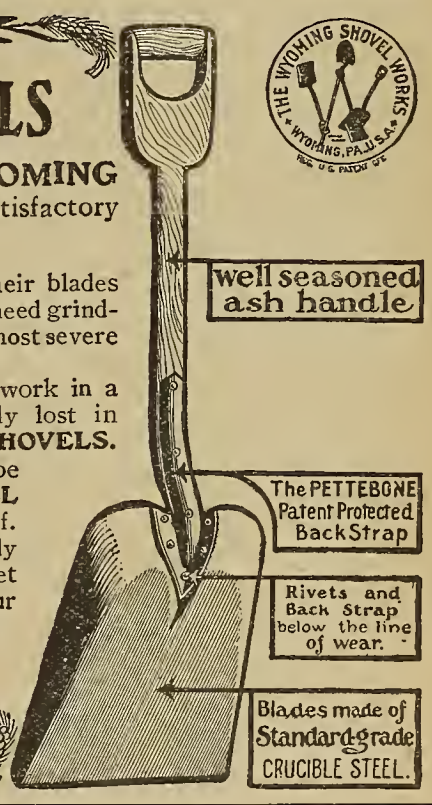
They are made to stand the gaff. Their blades are made of crucible steel—they seldom need grinding. Their strong ash handles defy the most severe strain you are apt to put upon them.

If you want to accomplish twice the work in a given time, and save the money usually lost in buying inferior grades, use **WYOMING SHOVELS.**

Your money invested in them will be well spent. Get a **WYOMING SHOVEL** to-day and prove its worth for yourself. All varieties of shapes. Every one fully guaranteed. Write for our Free Booklet "Calling a Spade a Spade." At your dealers, or conveniently supplied.

**WYOMING SHOVEL WORKS**
Wyoming, Pa.





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When you buy a Cream Separator you want a machine which guarantees skimming to a trace; which cleans easily; which may be operated with so little effort that a child may run it; one so carefully built that it will last practically a life-time; and a machine sold to you at a price you can easily afford to pay.

**The Macy Cream Separator will fill every requirement. Thousands of dairy farmers throughout the United States are now using this splendid machine. It has been manufactured and sold for the past five years, and it is rapidly displacing the widely advertised Cream Separators sold at two and three times its price.**

We want you to get our story. We want you to know the Macy Cream Separator. It will add from $15.00 to $20.00 per cow per annum to your profits. It will pay for itself in just a few months, and give you better service and more lasting service than any other Cream Separator manufactured, no matter what the name, make or price.

Do not be misled by the claims made on behalf of other Cream Separators. Do not be influenced by the sneers and insinuations of the manufacturers of the old-style Cream Separators who are constantly attacking those manufacturers and dealers who are selling more up-to-date machines.

### *Learn the Truth*

Investigate for yourself. American Farm Folk are the most intelligent citizenship we have. The farmer thinks for himself; he reaches his own conclusions, and then he acts. All that we want you to do is to get our proposition. We will leave all the rest of it to you. We will send the Macy Cream Separator to your farm to be tested by you—to try out in competition with any other Cream Separator manufactured; **none of them are barred.** We want you to run the Macy beside the other Cream Separators. Try it on hot or cold milk; test it for butter fat; test it for easy turning; for easy cleaning; **submit it to any test you may think of or the agent of any other Cream Separator may suggest.** Submit it to these tests for 30 days, and if at the end of that time the Macy has not demonstrated that it is the best Cream Separator from the standpoint of skimming efficiency easy running, easy cleaning, simplicity and durability, return it to us, at our expense of transportation charges both ways.

### *We Want to Send You*

our Cream Separator offer. We want to tell you how you can save one-half or two-thirds on your Cream Separator. We want to tell you how to add from $15.00 to $20.00 per cow to your income. We want to tell you how to get more cream and better cream from your herd than you have been getting in the past.

Just write us a letter or a postal card to-day, saying, "Please send me your Cream Separator proposition," and we will send it free and postpaid.

**Ask for Separator Offer No. 8700.**

**R. H. MACY & CO.,** Broadway at 6th Avenue, 34th Street to 35th Street **NEW YORK**


# Live Stock and Dairy

## Summer Care of the Farm Team

So often on most farms the team comes to the rush of spring work in a soft condition. Though many of us make an allowance for this condition, the allowance is not great enough, and as a result we have all sorts of troubles that lay the horses off at a time when they are most needed. When beginning the season's work, start easy until the horses become accustomed to the strain. Do not begin too early to increase the ration, and do not increase it too fast, for you may have some troubles all of your own.

Overheating is a matter which seriously affects the value of your horse for your own purposes as well as for sale. When the horse does not sweat readily, it is time to pay some attention to his condition. A little "spring tonic" helps the horse as well as man. Watch both the liquid and the solid excreta. A little oil-meal is a fine conditioner at this time of the year.

Sore shoulders is another trouble that causes much inconvenience at the beginning of the season. The shoulders are tender. A poorly fitting collar is sure to cause its full share of trouble. A good collar that fits well is a good investment. The use of many cheap, poorly made, cloth collars has nothing to commend itself. Many of our best horsemen will have nothing but a leather collar on their draft-horses. Be sure that the collars are clean each morning when the horses go to the field, and after they have worked a few hours it is a good plan to lift them up a little and clean them again. Bathing the shoulders at night is an excellent practice. Some teamsters I know always remove the harness during the noon-hour in order to remove the strain on the shoulders. Others unfasten the hames and throw the traces over the horses' backs. This may all seem needless, but sore shoulders are very uncommon with these men. Prevention is far more easy than the treatment, and this is another matter.

Currying is an important factor in keeping any horse in condition. I have heard horsemen say that a well-groomed horse can be kept on one half the feed required to keep one that is not well cared for in this respect. Clipping in the spring helps to make this easier, as it prevents the hair from forming in large bunches that are held together by the excess perspiration. I know a teaming contractor who would discharge his men if he would get his hand dirty by rubbing it over the backs of the teams. Currying at night is as essential as currying in the morning. Too much cannot be said about grooming. It is not a simple process of brushing off the animal. You cannot do it in three minutes. Many well-kept animals are thoroughly curried, then brushed with a long-fibered brush, curried again and brushed with short, stiff bristles, that are about as unyielding as a board. Then they are again curried and run over with a cloth that is sometimes oiled, though the oil will sooner or later hurt the gloss of the hair. The last process is what many term a cleaning. Contrast that with an ordinary currying.

C. A. Waugh.

## Points on Pasturing

It will probably be a long time, if ever, before all farmers practise the soiling system in the keeping of stock. Especially since there is so great a portion of Eastern farm lands too steep or rough to admit of profitable cropping, pasturing will be practised to furnish at least a portion of the feed of farm stock during the summer season.

Careful management would increase the amount of feed on such lands; sowing seed on the light places; top-dressing with a complete fertilizer early in spring; keeping the stock off until the grass is well started, also when too wet after rains, these things would often add much to the value of pasture lands.

Suddenly changing from barn-feeding to pasture is bad for the animal. The change should be made gradually; turning to pasture for a part of the day and feeding a slightly less ration in the barn as usual. The very young pasture is largely water and stock will lose flesh rapidly if entire dependence is placed upon it. Only June pasture seems to be a perfectly balanced ration and June conditions exist only in June. Hence, supplementary feeding will pay, especially for milk cows, in all other months even when pasture seems to be good. Cows should not be compelled to hunt all the time for enough to fill them. They do best when they lie down a good part of the day. R. P. Kester.

## The Cracker-Barrel of Fate

I am settin' on the cracker-barrel of Fate,
With Echo darkly dinning, "It's too late."
Chaw dried apples and munch cheese,
Kick the dog with mange and fleas,
For I'm settin' on the cracker-barrel of Fate.

I am settin' on the cracker-barrel of Fate;
For I've always had my luck bad, straight.
My suspenders are just strings,
Hain't a button on my things,
For I'm settin' on the cracker-barrel of Fate.

One day, settin' on the cracker-barrel of Fate,
Opportunity went sailing in my gate,
And she lit close to my door,
But I was at the store,
A-settin' on the cracker-barrel of Fate.

Rose Seelye-Miller.

## Dairygrams

It pays better to give some cows away than to keep them.

There is too much guesswork in feeding all young animals; study the methods recommended by experts.

Dirt in the milk means injury to butter and to health. Keep the udder and the hands of the milker clean.

Cream should never be allowed to stand long enough to show a watery appearance between the cream and the milk.

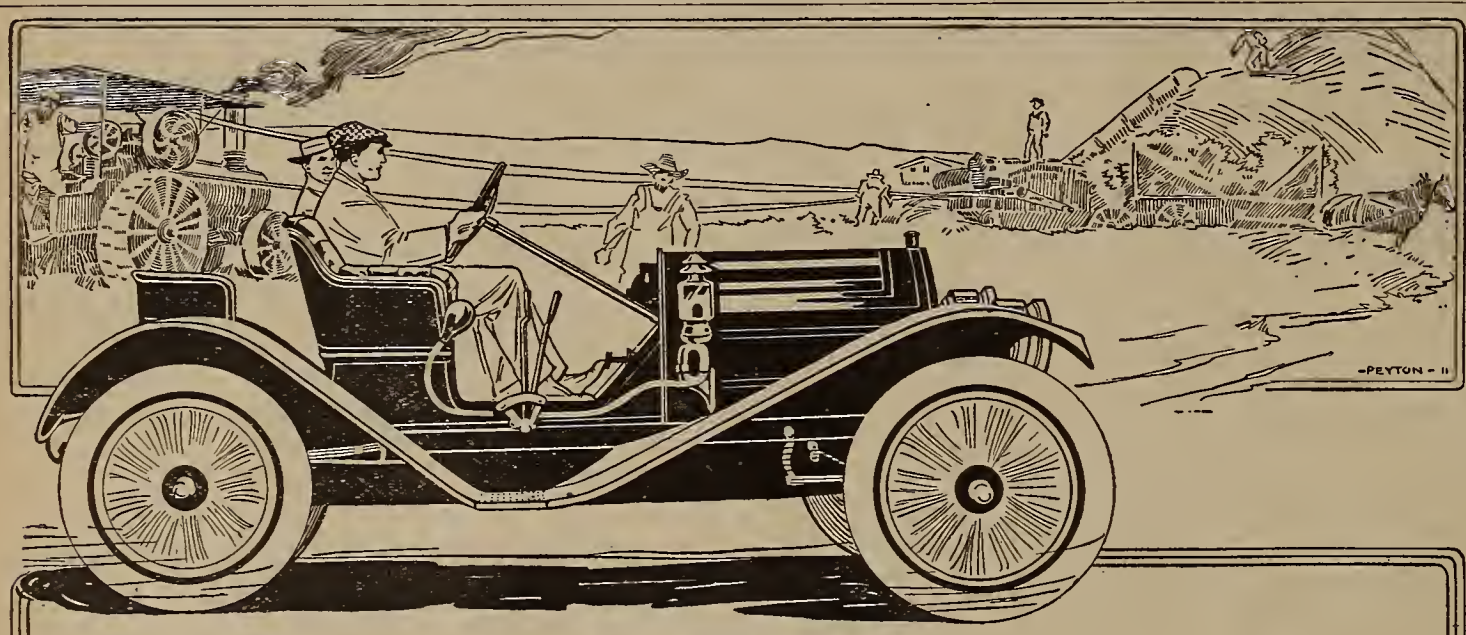
The farmer who doesn't know the actual, cream-test value of each dairy cow in his herd, is likened unto the proverbial "blind dog in a meat-house."

Butter flavor depends largely upon the sweetness and the flavor of the feed given, and the surroundings of the milk and cream before being turned into butter.

A persistent milker is made very largely by her treatment the first season. If carelessly handled and allowed to dry prematurely, she will form a habit that will never be broken.

If the hand-fed calf once gets back with the cow after being taught to drink skim-milk, you may just expect the little fellow to have a deranged set of bowels and a bad case of scours.

A good milch-cow has broad hindquarters and thin forequarters, thin and deep neck, pointed withers, head pointed between the horns, flat and fine-boned legs, and fine hair. Choose one with udder well forward, teats wide apart and large enough to be easily grasped. A medium-sized cow will give the most milk in proportion to the food she eats.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# Live Stock and Dairy

## Silo Experience and Satisfaction

Out here in South Dakota the silo is to many still an experiment, but it is no longer so to those who have used one. Silos are here to stay, and are increasing rapidly in numbers. Once the keen South Dakota farmers see a "good thing," they are quick to adopt it, and good things spread through a community almost as rapidly as the prairie fires used to during the days of the earlier settlers.

To give Farm and Fireside readers an idea of the rapidity with which these progressive South Dakota farmers take hold of the new things, once they see they are good, I will tell you of the experience of our local silo agent.

We wanted a couple of silos, so we wrote to one of the leading silo manufacturers stating our wants. In a few days the local agent, who, by the way, was a stranger to us, came to our place with our letter to the manufacturer. We gave him our order for the two silos that afternoon, and with our two as a starter he canvassed the community carefully and during the spring got orders for fifty silos and a large number of cutters. The silos came by the car-loads just before harvest, and there was a general changing of work among us, all helping one another build the silos. When filling-time came, we were all green at the business, but we changed work with one another and all learned the new work together.

Now for results. Without an exception every man is well satisfied with the result of his winter's feeding of silage, and not one would be without a silo again. Among us all, we have fed silage to all kinds and classes of live stock, and I am compelled to say with uniformly good results.

The dairy cows and sheep have probably responded best to the use of silage, although the brood-sows and the beef-cattle as a rule never looked so well on these farms before. Nearly every farm is stocked heavier than ever before, and the hay crop was shorter last year than for years back. What does all this mean? It means the silo has come to stay, and that the soil fertility will be beginning to increase, and that far more live stock will be kept on each farm in the future.

When our summer pastures get dry, we will have our silage to fall back on, and it will not be necessary to sell the surplus stock to help flood our already glutted market, as used to be the case when the general dry season appeared. It means that this western country is soon to be like the East. We are profiting by the experience of the eastern farmers, and we are more careful of our soil fertility than they were when their land was as new as ours now is.

This in time will tell, for it means the upbuilding of a strong agricultural foundation; the maturing of men of strong, active bodies, and clear-thinking, determined minds, ready to take hold in an intelligent way of the more advanced methods of agriculture.

Paul H. Brown.

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For keeping live stock healthy, an ounce of salt is worth a pound of medicine.

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## Flaxseed for Skim-Milk Calves

We have found that flaxseed is the best substitute that can be used to replace butter-fat removed by the cream-separator. Flaxseed has all the qualities demanded of such a substitute. It is high in oil or fat. It is very palatable and its effect on the calf's digestive system is beneficial.

To prepare flaxseed for this use is a very simple process: Simply boil it in about four times its bulk in water. The boiling is to be continued until the whole seeds have bursted, after which it will be a jelly-like mass. Enough may be prepared at one time to last for several days, as it is not liable to spoil.

About a half teacupful should be fed to each calf. This is measured out and mixed with the calf's allowance of milk just before feeding-time. Flaxseed fed in this way makes a wonderful difference in the growth and appearance of the skim-milk calf. However, it will not entirely take the place of the butter-fat. The skim-milk calf even at its best will not grow as rapidly or mature as early as the one that suckles its dam. Yet in nearly all cases it is more profitable to milk the cow and raise the calf by hand.

Other substitutes for butter-fat we have found to be quite generally unsatisfactory. Oil-meal is recommended and used by many. Yet oil-meal is flaxseed out of which the oil has been extracted. Thus the same thing that is lacking in skim-milk is also lacking in oil-meal.

Corn-oil was once heralded as the ideal substitute. When tried, it was found to be unappetizing and to produce ill effects on the calf's digestive system. Ground corn is about as good as anything we have found aside from flaxseed.

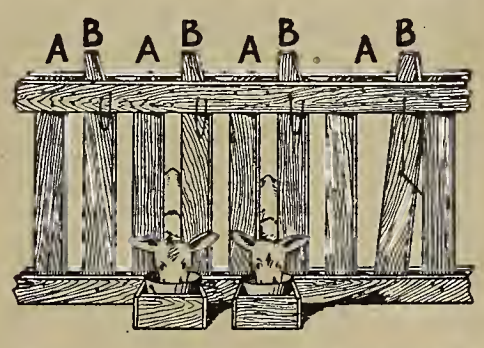
It will pay every farmer who has a bunch of calves every year to raise a patch of flax just for the purpose of obtaining flaxseed for his calves.

H. E. McCartney.

## Calf-Feeding Made Pleasant

Everybody knows what a nuisance it is to feed half a dozen hungry calves loose in one pen. Feed them in stanchions, and at once you are rid of the usual scuffle; the calves do not steal or spill each others' dinners, and you can do away with the nasty habit many calves have of sucking each other's ears. Leave them in the stanchions ten or fifteen minutes after they finish drinking, and they will be all over the notion of ear-sucking. A good many farmers use calf-stanchions now, and I believe they all would, once they tried the plan.

The stanchions used by the writer are made of one-by-six boards, put together in the usual way—two horizontal boards at the bottom and two at the top, with the uprights nailed in between them. The uprights AAAA are fixed in position. The uprights BBBB are pivoted on a spike at the bottom so they can swing open, as shown at right. There should be about five inches space between A and B for the calf's neck, when the stanchion is closed. Blocks are nailed in between the fixed and the movable




uprights to keep them from coming together at the top. Lock the upright (B), when closed, by shoving a spike through a hole drilled in the horizonal pieces and upright. Have a string on the spike so that, when pulled out, it will hang and not be mislaid. The stanchions may be made any height sufficient to keep the calves from jumping over them.

H. C. Wissman.

---

Sudden changes in feed will cause the cow to shrink in milk.

It's an excellent and profitable plan to begin spraying the cows early in the season, before the flies are so numerous. The hair and skin of the animals thus become so saturated with the spraying solution that the fight against the flies will be more successful from the start.

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## Constitution in Breeding-Stock

In the selection of a stallion it is important to see that the horse has a stout constitution, or his sons will not be valuable or profitable. This matter of appetite and digestion should, in the stallion, represent a very full and greedy habit, as the sire does not usually do the severe work which impairs the digestion of the gelding. When a colt is added to the list of geldings, his vital forces are thereby materially reduced, his bodily strength is lowered, his digestion is never again so good, and his circulation may yet be healthy, but it is milder.

If a gelding be a gross feeder, his troublesome excess would have been more pronounced had he been preserved entire. If a stallion be a light feeder, his stock can never be worthy of stable room. Whatever else be overlooked, the back, body and limbs must be well developed, and if you must risk something, let it be the frontage. Size is an important element of value, but a leggy horse is highly objectionable. A horse of pony type or small features is also undesirable, handsome though he be.

Not only the stallion, but the brood-mare of any type should have a constitution which cannot be doubted. Every good judge of horses can see at a glance whether she possesses it or not. Be sure there is no hereditary unsoundness, as it is almost certain to ruin the youngters. Above all things, see that there is no roaring in the family. Any small unsoundness in the mare's organs of respiration will not be small in her sons.

To a certain extent, roaring is latent in the mare, but the bigger and finer looking her sons, the more they will suffer from this dire derangement. A two-hundred-dollar horse is reduced to forty dollars if he makes a noise, the loss to the breeder being considerable. Temperament is highly hereditary, even bad habits, such as the disposition to run away or kick in harness. An ill-mannered mare may breed a good, tough, sound youngster, but her filly youngsters should be broken in very early in life and before they become strong and resolute. The filly foal of a kicking cart-mare should go in the plow-team at eighteen months, then she is readily managed; but if you wait another year, she may give much trouble. Very few geldings kick in any tackle.

W. R. Gilbert.


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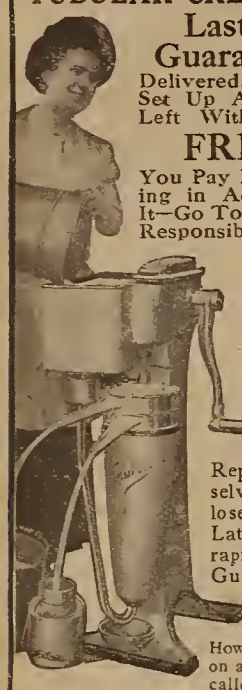

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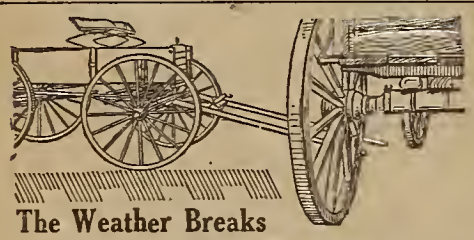
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# Live Stock and Dairy

## Sheep-Raising in Oregon

"WELL, Oregon wins against the best ram in England and that is recognized as being the best in the world," declared Mr. Harding, owner and exhibitor of the English prize-winners. "I bought this yearling at the Royal Sheep Show at Liverpool, when grand championship prize was placed on it by the judges. I paid a fancy price for him and this is the first time he has met defeat since I put him on exhibition. You have a climate here similar to that of England and I attribute the result more to climatic conditions than to anything else. You have an ideal country for the long-wool sheep."

These were remarks made by F. W. Harding, a prominent Wisconsin breeder of live stock at the last annual convention of the

Baron Duke, Cotswold Ram, Best Long-Wool Sheep in the World

National Wool-Growers' Association held at Portland, Oregon, when his famous imported yearling ram was defeated by an Oregon product.

The winning ram, whose picture is here reproduced, is an animal with a long Oregon ancestry, a native of the soil and shows what the state has accomplished in producing fine sheep.

According to Western sheep authorities the success of Oregon breeders with long-wool sheep is due primarily to climatic conditions which produce a wide variety of forage plants. It was also the opinion of experts at the convention that no better Rambouillets could be found in France or Germany than the prize-winners, which were raised in the Pacific Northwest, where the breeding of fine sheep promises to become as important as the already famous fruit industry. D. B. S.

You can afford to pay a little more for a horse or a cow that has been brought up by a man that has a good, honest heart under his jacket.

---

Let the vessel, from which you allow the skim-milk calf to drink, go without washing a few times after feeding, as many farmers do, then pour a little milk-warm water into it and take a sniff of the scent clinging to it. You will then understand why it is so important that these vessels be taken care of just as you would your milking-utensils if you would promote the healthy development of the calf.

---

## Producing Pork Profitably

THE trade for pork and bacon fluctuates greatly, so it comes to pass that the unstable breeder is frequently making mistakes. He makes a profit out of some useful breeding sows and straightway puts a number of extra gilts to the boar.

As a result, almost as sure as sunrise, by the time the farrows come and are ready for sale, down goes the trade, and there is grievous loss, for no animals eat their heads off sooner than pigs when on the low grade.

There is a further dire flatness in the pig market, so he who has overfilled his sties finds money going out at every hand for pig-food, for litter, for labor and all the rest of it. So he becomes a sadder, but not a wiser, man, for he disposes of his brood sows, or most of them, seeing no good in pig-breeding.

Consequently, many more people besides him follow suit, with the result that before long there proves a dearth of pigs in the land and prices for all sorts advance by leaps and bounds, yet these unwise men have no stock to sell, so that they are out of the running.

Moral: Do not try to dodge the trade in breeding. Go steadily on, producing a judicious quantity, and so make sure at least of hitting the good markets as well as the bad and always having on hand subjects to eat up the waste from granary and dairy. Then, if the average sum made is not much, there is certainly but correspondingly little cost in feeding.

No man should breed bad pigs. It may appear that it needs no Solomon to tell that, but it is an absolute fact that about half the stock bred in the country is not nearly as good as it ought to be, and far too many pigs are absolutely bad.

The ill-thrifty, coarse-skinned, stiff-bristled pig is always a debtor. On the contrary, the thrifty one with quality is a creditor of some degree, if trade is anything like approaching good—not a loser in a slack trade.

The shrewdest pig-farmers have satisfied themselves that crosses often pay better than pure breeds, though some pure breeds are crossed to more advantage than others, I have found.

The Middle White, for instance, is hard to improve when it is crossed with, say, the neat, high-qualified Berkshire. The Middle White is sometimes called the Middle Yorkshire, being about midway between the Large White and the Small White. I have observed excellent results, too, from blending the blood of the Tamworth and the Middle White.

The special advantages to be derived from judicious crossing are improved constitution, greater freedom from disease, better size, quicker growth and more prolificacy. But what the markets most desire should always be kept in mind when deciding upon breeds and crosses, for even color is a matter of importance. Again, first crosses answer the best.

Many folks pig-farm who have no chance of making profit at all. Those men are such as have to buy all the feed for their stock, and are as short of practical knowledge as of feed.

The ordinary mixed land-farmer, the dairy farmer, the miller and the butcher are the men to keep pigs at a profit. They all have what to them would otherwise be waste stuffs, so that all they have to do is to regulate the quantity of stock correctly, and then profits are assured, other things being equal.

The mixed land-farmer will make "Old Bet" and her family get half their living browsing in paddock, orchard, on the stubble or under the oaks, and that's the way to pig-farm to profit.

The dairy farmer is in a better position still. He has buttermilk or whey or skim-milk and perhaps of no better worth than to give the pigs. He often finds pork and bacon making the more profitable branches.

And so with the miller and the butcher. Both have a lot of offal to dispose of, and cannot dispose of it to better advantage than to make pigs.

May no pig-food, then, be purchased with profitable results? Assuredly yes.

Sometimes our pigs increase more than calculated on. Sometimes home-produced

"Old Bet" and Her Family Must Rustle Half Their Living

foods fall short. Again, that trade which I have spoken of may require us to hold stock a while, trusting for a turn in the tide.

In these cases there are material quantities of victuals to be purchased. Still, that is different to systematically keeping pigs with the certainty of having to purchase all they require, even to the bed they lie on.

W. R. GILBERT.

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## Sunday Feeding on Stock Farms

WE HAVE found in our experience with all classes of farm stock that it pays to omit one feed of grain from the regular bill of fare, on Sunday. In fattening animals that are being fed almost to the limit of their appetites, we have found that they will come to the feed-box on Monday morning with an unusually keen edge on their appetites which stays with them most of the following week. We are confident that we get such stock to eat more during the week by following this method than would be possible if we fed the usual number of feeds on Sunday.

We have practised this with growing stock as well as with animals for fattening, and have found that they do equally as well, if not better, with one feed of grain omitted on Sunday. During the summer the hogs at pasture are fed only in the morning on Sundays.

It is positively injurious to horses to feed them the usual amount on Sundays when they are not working. Heavy feeding on idle days brings on serious digestive disorders, and especially that dread affliction, azoturia. Since we had a few severe cases of that, we have not only omitted the noon feed, but have reduced the morning and evening feeds to about half of what they get on work-days.

Omitting a feed on Sunday also gives the farmer or his hired men a little more time off. Sunday work is one of the biggest criticisms to working on a stock-farm. Our method eliminates that to a considerable extent. By following this plan, we not only are getting a little more time off for the Lord's day, but feel that we are benefiting the stock by giving their digestive systems a rest. H. E. McCARTNEY.


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From Factory To Horse

# Who Will Rule Alaska?

## By Judson C. Welliver

ALASKA seems a long way off. Only a few years ago it was about as well known as the Antarctic continent. Its chief products were supposed to be icebergs and blizzards. To-day we have a faint realization that Alaska means a lot to us. Since the North Pole has been reached, and the South Pole almost; since Canada has been developed well up into the Alaskan latitudes, and, especially, since millions in gold have been brought down from the shores of the Arctic Ocean, Alaska has been getting a deal closer to us.

Stop and think that vast areas of Alaska are no farther north than highly developed and rich parts of Scandinavia; that Lapland is in about the same latitude as the great valley of the Tanana River, the Ohio of our northwestern domain, and that Archangel, a really important provincial capital in Russia, is still farther north—consider these things, and it is not difficult to understand that, while Alaska is not likely to be annexed to the banana-belt, it is certain one day to contain a big and important population of American citizens.

The summer is short, but it is filled with long days of sunshine, and crops grow and mature fast. People now living will doubtless see the day when agriculture will produce vastly more wealth annually than mining.

That's Alaska of the future; three times as big as Texas; ten times as big as Iowa; richer, perhaps, in copper and coal than any other part of our country. And who's going to own it?

Recently a government department reported that a forest three hundred and eighty miles long and sixty miles wide, in California, belongs to the Southern Pacific Railroad. It is the greatest lumbering area in the country; about a hundred billion feet of potential lumber in it.

That forest was given to that railroad—given in land grants to induce the construction of the road.

### Will the Mistake be Repeated?

CONSIDERING present prices of lumber, and considering that the Southern Pacific is not permitting much of this timber to be cut, but prefers to hold it for still higher prices, it seems as if somebody made a mistake giving it away, doesn't it? Well, we are getting ready to give Alaska to another railroad interest; to turn over its agricultural, gold, coal, forest and copper resources to a group of millionaires who have seen farther into the future than we see.

These men are different from you: they honestly believe that what I am saying about the great future of Alaska is true; they have been there and seen; they are backing their judgment with millions of cash, and they propose to sew up Alaska in a sack for their own use.

These prospective grand dukes of Alaska are the seven Guggenheim brothers, dominating personalities in the Smelting Trust, the greatest producers of precious metals in the world. They have made vast fortunes doing just such foolish things as the conquest of Alaska may now seem to us; and they are out for Alaska. What are we to do about it?

The Guggenheim interests are organized in the Alaska Syndicate. It controls about all the ships that go to Alaska; the harbor facilities there; the great gold properties; the famous group of "Cunningham claims" in the Bering River coal-field will shortly become the property of this syndicate, in all human probability; the Bonanza copper mines, on the upper Copper River, are theirs; the Matanuska coal-field is controlled by them, because they own the only railroad that can enter it—in short, they are already well on the way to overlordship of the whole situation.

Let these men alone for another decade, and they will require a quarter-section of automatic counting-machines to calculate their profits.

### Transportation Control Means Total Control

THEIR plan is simple. It is well understood. They propose to control the transportation, and through it to place everything else at their mercy. "One half the gross figure on all Alaska business to-day represents costs of transportation," said Delegate Wickersham, who represents the territory in Congress, in talking to me about Alaska's needs only to-day. Think of that! Fifty per cent. toll taken on all business, for carriage!

No wonder the future rulers of Alaska have calculated that if they had its transportation, they would have the country. What they didn't own would be working for wages and giving them the profits.

The problem of controlling transportation in Alaska is simple. There are only a few available harbors, on the southwest coast, which don't freeze up in winter. There are only three practicable routes from these ice-free harbors into the interior. The people who hold the harbors and control these railroad routes have the situation in their grasp.

Three railways are built or building, to control the three good routes; they are all closely affiliated with, if not actually controlled by, the Alaska Syndicate. The most important of them by far is the Copper River and Northwestern.

### How the Syndicate Ground Its Ax

THE road was started at Cordova Bay, and run up the Copper River to the Bonanza mines and the Matanuska coal-field, about two hundred miles. It is now about completed over this route. It occupies a canyon of the Copper River, so narrow, tortuous and difficult that it is physically impossible for a second road ever to parallel it.

After the road was built, with Cordova Bay as its coast terminal, the fact developed that the Cordova harbor was useless, or nearly so. A million or more was spent in artificial harbor works, but a storm swept them away, and it became necessary to find a better terminal. The engineers picked on Controller Bay, some fifty miles down the coast, as the one available harbor. Controller Bay must be secured.

But meanwhile the Alaska Syndicate had got "in bad" with the people of the United States. There had been a lot of talk about how it financed the pleasant trick of grabbing the Cunningham coal claims—the same claims that Pinchot tried to save, and because of which the Ballinger-Pinchot feud and scandal were hatched.

So a dummy corporation was formed—as the story runs in Washington—called the Controller Bay Railway and Navigation Company. This company claimed to be entirely independent of the Alaska Syndicate. It sent R. S. Ryan to Washington to lobby for it; he was president of the corporation. He explained that his company was going to build a railroad that Alaska greatly needed.

At that very time it was known by everybody with any Alaska information whatever that the Copper River road was seeking a new harbor. Investigators had learned the situation at Cordova Bay; the truth had been widely published about it, and it seemed as if a man with one eye blind and a cataract as big as Niagara in the other could have seen that the Controller Bay Railway was simply a stalking-horse to get that harbor for the Guggenheim road.

### The Arrangements Were Privately Made

RYAN went to the forest service, which bosses the national forests. Pinchot was forester, and, being suspicious of Alaska grants—for, although that was about two years ago, he already scented the Cunningham scandal—he would not recommend withdrawing these lands from the forests. His bureau declined to do anything for Ryan.

Then Ryan appealed to Secretary Ballinger, and got a more friendly hearing. Ballinger could see how a railroad without a terminal wouldn't be of much account; and the Alaskan odors didn't worry him so much. He was willing to recommend the thing.

Then Ryan carried it up to President Taft, and the President, after conference, as is now explained, with his cabinet, decided to grant the request.

Here comes an interesting feature. The method of eliminating lands from national forests has been for years to have the forest service recommend it, and draw up the form of a proclamation. This proclamation, being signed by the President, announces that thirty days from its date the described lands shall be withdrawn from the forest, restored to the public domain, and open for entry as other public lands are. The thirty days' notice is designed to give everybody a chance at entering the lands.

Well, that particular sort of publicity was just what Ryan didn't want. So arrangements were made to have this land withdrawn from the forest, not by proclamation, but by executive order. This meant that the President would sign an order, taking effect at once, and the business would be finished: no proclamation, no fool publicity, no danger of some rank outsider getting there first and spoiling the carefully laid plans.

And thus it was done. Ryan only wanted three hundred and twenty acres, but for good measure the executive order eliminated twelve thousand and eight hundred acres from the forest and opened it to entry.

Ryan didn't waste a minute. Before people in general knew that the land was opened, faithful servitors of his had filed on the precious terminal-site, and the Controller Bay Railway and Navigation Company was in control of the harbor so sadly needed for the Guggenheim railway, but which the Guggenheims did not dare ask for in their own right!

It was all such a quiet performance that nobody knew it for many weeks afterward. The President's executive order was issued October 28th last. In December following, Delegate Wickersham, who has been consistently fighting the Guggenheims, discovered that such an order had been issued. He smelled a mouse instantly.

Careful investigation convinced Wickersham that the Guggenheims had turned a big trick. They already had the Copper River road built; they held an option on the Cunningham claims, and Wickersham confidently believed they would ultimately be able to exercise it. They needed just one thing to perfect their grip on the situation—that was a harbor.

When Judge Wickersham had surrounded and digested all the facts, he was the maddest man in Washington. He pesticated around till he was loaded on the subject, and then unloaded his information on Senator LaFollette. LaFollette promptly introduced a resolution calling on the Secretary of the Interior for information as to entries made on this land and other necessary details.

### Government Ownership of Alaska Railroads

IN DUE time the Secretary replied, and, sure enough, it was shown that people in Ryan's confidence had entered the terminal lands, and were going to turn them over to the railroad company!

It was now time for LaFollette to get hot under the collar. He cast about for a way to head off the Alaska Syndicate from getting the whole territory, and here is the cheerful device he tells me he has decided upon:

He is going to introduce a carefully drawn measure, providing that the government shall build, own and operate all railroads in Alaska. This he considers the only means to keep the situation in hand.

It is a radical move, but an increasing number of people believe it is necessary to the territory's salvation.

We talk endlessly about our coming commerce in the Pacific. We are spending three hundred and seventy-five million dollars building the Panama Canal in order to promote that commerce. But commerce in the Pacific depends in getting coal to run steamships. There is none on the Pacific coast worth the while, save that in Alaska. The Alaska Syndicate will control that coal if it is let alone. If it owns the railroads, the harbors, and the steamships that ply to Alaska, we may as well hang up our fiddle; there'll be no cheap coal for our Panama and Pacific commerce unless the Alaska Syndicate chooses to give it to us.

More than all this, the present Congress is going to make a strong effort to reorganize the government of Alaska. The territory is asking for the creation of a territorial legislature. President Taft is willing to have such a legislature, but he wants its members to be appointed by the President. That plan is also favored by the Alaska Syndicate. It is opposed by Delegate Wickersham. The Alaska Syndicate and the national administration joined hands in the determined effort to defeat Wickersham for reëlection last fall; but he won.

### The Fight is Just Beginning

NOW he is pressing a bill to provide a territorial legislature, consisting of two houses. It is confidently expected that this measure of Wickersham's will pass the House. There will be a big fight over it in the Senate.

The fight for the preservation of Alaska to the public interest is only just beginning. Because of its importance as a factor in the development of our whole Pacific West and of our oriental trade; because our navy and our shipping need cheap coal; because such a vast country can never be advantageously developed if a huge private interest is in complete domination—for all these reasons, the contest will be one of very real concern and financial importance to the whole country.

# A Hero of the Earthquake

## By Maryel Vance Abbott

Illustrated by E. A. Furman

THE motley crowd of pale-faced fugitives streaming up the avenue gazed blankly at the anguished woman, writhing in her husband's arms, and passed stolidly on.

"I see him! Save him! My boy! My baby!" her voice shrilled high above the deafening roar and crash of falling buildings.

"Where?" inquired a small boy, leaving the spectral ranks. "Where does she see him?"

"Third story," indicated the man hoarsely. "She can't—*can't*—too late!"

The boy looked across at a handsome residence, tottering, menacing the avenue—the front and sides torn and gaping.

"He's alive! I know it!" shrieked the mother. "Nurse saved herself—save him! Save him!"

The boy darted across the twisted wreckage and leaped agilely into the ruined home. The front staircase pitched forward at an impossible angle.

"There must be a back one," he breathed aloud, and flew up the slanting floor and found it, broken, torn and gaping. Climbing monkey-fashion, jumping a frightful gap, he reached the second floor; then up another ruined stairway—hanging to the carpet, he fought his way to the nursery.

Down in a far corner, happy amongst a heap of overturned furniture, cooed and gurgled a little dark-haired baby. There were many new and wonderful playthings for the little fellow; pictures, hair-brushes, broken glass—but a caster on a turned-up bed was most engrossing. It was something to twist, to laugh and talk to, and he resented being seized and carried away from his treasure.

"Keep still!" said the boy to the kicking baby. "I'll need both hands to get down—I needed them coming up."

The boy was only eleven years old and undersized, but wiry and alert.

"Here," he said, pulling off an overcoat worn over a little thin shirt, "put your arms around my neck, baby."

The child was boosted up, and he slipped on his roomy coat in an instant, buttoning the two bottom buttons; the baby hung safely, papoose-fashion, at his back and he was free.

The descent of the first staircase was perilous, but he hung by his feet and hands to the swinging carpet, and the second floor was reached.

Then came a frightful, charging, indescribable groan and crash from the overburdened earth.

"It's another coming!" said the boy. The swaying walls rose drunkenly before him, the staircase was impossible; but he crawled out on a tiny balcony, just as the house swept brushingly by a row of magnificent shade-trees. He reached up, caught a huge limb that cracked on the porch-rail behind him and hung there an instant, as the house went crashing into shapeless ruins below; then, all instinct, a climbing, grasping animal, he made the tree-trunk in safety.

There he thought of the baby.

"I wonder if he's dead—if the collar's strangled him?"

Hanging on with one hand, he reached behind to the little head nestling against his shoulder. Two little teeth bit playfully into his wrist, and the baby gurgled approval of the new and astonishing game.

"He's all right—now, for getting down."

They were on the bottom limbs, the ground twenty feet below, and the tree was swaying, groaning. The boy assured himself the buttons would hold tight, and then, hand over hand, clinging, bracing with his feet, scarred, bruised and torn, finally reached the unstable earth with his burden.

Out and around and over the ruins he picked his way to the agonized mother, but she was gone! Hundreds were passing by, hurrying, limping, praying, cursing, but there were no signs on the fire-lighted avenue of the owners of the baby.

"Come, move on! Move on!" commanded an officer, as a company of soldiers came marching forward. "On to the park! On to the park!" and the boy moved mechanically with the crowd, the baby at his back, blinking with interest at the fires and moving objects around them.

Up and down amongst the thousands packed together in the dismal park, the boy wandered for hours, looking vainly for the mother.

"When this quaking's over, you'll easy find someone to take him," advised a kindly little woman with twin babies. "He's bright and pretty, and I'll keep a lookout for someone who'll want him. You better find a place and rest now; you're all worn out."

The little guardian sat down on the edge of a driveway and rocked his restless charge, who was getting fretful, unmanageable.

"He's hungry," explained a big burly woman near by with a number of unkempt children.

"I suppose he is; where'll I get something for him?"

"Goodness only knows," said the woman dully, "it looks like starving comes next!"

"I'll look for something for your children and the baby, too, if you'll keep him," he bargained, and the woman consented.

Wrapping the child over and over in a roll made of his rough overcoat, he gave it into her keeping, and went off through the keen air in his thin little shirt-sleeves.

Outside the park, he found the safest looking deserted dwelling and climbed in the kitchen window.

He found a loaf of bread, some cakes; a spoon and saucer were thrust in a pocket; a roll was made of an old shawl and little garments that might do for the baby, and a tin bucket was filled from a refrigerator.

"I hope it's not stealing," he debated. "I'll bring the shawl and things back if the earthquake ever gets over," he decided.

On his return, he found the baby crying bitterly, in care of one of the woman's children.

When the food was divided fairly, he carried the baby to a far corner.

"I'll not leave you with them again," he said emphatically, looking at the little tear-stained face and quivering lips. "I guess you and me'll be chums and stay together after this. Nobody seems to belong to us." He made a mixture in the saucer of bread, cooky and water, and fed the eager, famished child.

"Is that good, brother?"

"Dood," said the baby, catching at the spoon.

"Why, you can talk. Say 'Ralph'—my name's Ralph,

"Aff! Aff!" crowed the baby, dimpling with a winsome smile.

"How mother'd like him! But she'd like him cleaner!"

That thought worried the boy, and he saved enough of the precious water to wash the little dark, roguish face after the meal.

A pale woman with a broken arm called him: "If you'll come here I'll show you how to make the baby comfortable."

And under her tuition Ralph learned how to care for the little fellow and dress him after a fashion in the rough garments found in the kitchen.

"It doesn't matter what people wear here," thought Ralph, looking over the queerly-arrayed refugees, "but when I can work again, I'll get him some decent clothes."

That night, wrapped in the big shawl, they were sheltered from the keen ocean wind under an ornamental hedge. The baby slept soundly, but Ralph's eyes were open, and he planned for the future. "I'll always keep him and work for him, and we'll be family for each other. I'll get some woman to tell me what to feed him. He's no common baby; he doesn't cry at all, when he's treated right, and he's awful smart—he knows me already, and my name, too."

Late next afternoon, as Ralph returned from carrying water to some sick people, the little woman with the twins called: "I think I know where you can get rid of that baby, now."

"Where?" asked Ralph vaguely, not caring to confess he intended keeping the baby himself.

"Judge Ayres' folks by that farther gate. He's a big man in broadcloth, an' his wife's in a silk wrapper an' long dark braids. He's rich and their baby was killed yesterday, an' his wife's 'most crazy, so they might like yours—it 'ud be a good place."

"Yes, ma'am. Thank you," said Ralph, and he hurried out of sight, holding tightly to Brother. He wished, if the earth were going to give another quake, it would do it just then, there might be something to keep him busy.

"Here, boy," called a stalwart young man, as if in answer, "help tie this bandage."

Ralph stopped and watched him twist a strip of white cotton around a discolored right arm.

"Is that too tight?" inquired the boy.

"No, you can't hurt it. I'll put you wise," he said smartly, "your wrists are bruised; better tie one up and quit carrying water to guys there's no money in. You'll need your strength 'fore this quake's over. My arm's not hurt; I just painted it with iodine, so's not to be put on a work-gang. I'm a dentist and must keep my hands soft."

"But people don't want their teeth fixed now."

"No, but they will, and it's no snap cleaning up the ruins, anyway. Let the other fellows do it," he nodded knowingly as he went off.

The boy looked after him with a frown. "He's a shirk, all right!" he decided and then went back and sat down on the shawl by the injured lady. Then the thought suddenly struck him, that he was also *shirking*, that the description of the Ayres fitted the baby's parents, and he ought to find out, at once.

But Brother was dear, warm and tangible. His roguish dark eyes and smile were the only wholesome greeting in all that throng of anguished humanity; his little loving hand, the only intimate, grasping one. It seemed as though they had been affectionate companions for years, so full of action, suffering, experience had been the hours, and it was hard for Ralph to think of giving him up.

But Brother hated inaction. "Aff! Aff!" he cried, lifting little appealing hands and rubbing a soft cheek against his absorbed protector in the way the cunning rogue knew brought attention.

The injured lady looked up and sighed: "Poor little motherless baby!"

Ralph arose so suddenly that the baby gasped for breath.

He braced his shoulders back and carried the child across the park to the farther gate, holding tight one little hand under cover of the quilted jacket all the way, for he instinctively felt it was *good-by*.

On a gray blanket spread over trampled grass, close to the gate, were a striking couple, and the boy recognized them at once. The lady wore a silk wrapper, and two heavy braids of dark hair fell over her drooping

[CONCLUDED ON PAGE 23]

"The boy stole back to his accustomed place"

# "The Dearest Spot on Earth"

By Dr. John E. Bradley

No one loves his home more truly than the American farmer. It is not merely his abode; it is part of himself——the visible tie which binds him to those he loves. Within its walls is shelter from storm and sun, freedom from formality and restraint. Here he may talk or be silent, join in his children's games, or peacefully doze by the fireside. When he retires to rest, he says, not "How tired I am," but "How good the bed feels." If trouble or disappointment comes, he finds relief at home.

### Better Than Home in the City

He has an advantage over his brother who left the paternal roof, years ago, and went to the city. This brother and he used to work on the farm and build air-castles together. When he goes to the city now, he visits his brother in the great hotel where he lives. He finds him and his wife in a little parlor with bedroom and dressing-room attached, provided with rich, but unmistakably "hotel" furniture; they partake of rich but indigestible food, cooked and served in "hotel" style, surrounded by a throng of hotel guests, most of whom they do not personally know. He goes early to his business, and his wife passes the day in reading novels, dressing, shopping and, perhaps, going to a matinée—a restless victim of idleness.

He looks up an old school-mate who also went to the city to get work. He finds him keeping house in a few small rooms in a flat, with scant air and sunshine, into which he is crowded with his wife and children, in visible discomfort. This old-time friend shares the halls and entrance of this great building with a hundred other occupants who change so often that he knows but few of them by sight. The air is full of sounds and odors, and he complains that the place is so noisy till late at night that he cannot sleep.

### The Farmer Is To Be Envied

Well may our farmer congratulate himself as he returns to his home. Whether he has more money or not, he is better off than his city friends. His life and interests are centered in a home which never fails to bring peace and gladness. Perhaps he hardly realizes how much it is to him. It was not one who was happy and settled in domestic joys who wrote "Home, Sweet Home," but a roving actor who died in far-away Tunis. The greatest power in building up the prosperity, good morals and religion of a community or a nation is the home. Good homes or bad homes decide the future. Daily fidelity in home duties is the best training for a noble character.

### What Gives Home Its Charm?

But homes are not all alike. How strangely they differ. We wish ours to be the best wherever it may be. What gives it its value, its charm?

Not money. There are so-called homes —palaces on which costly decorations and classic art have been lavished—which are like burial-vaults. If you catch a breath of the air which pervades them, it makes you shudder, for it is warmed by no kindly sentiments.

And there are homes of poverty which are also the abodes of cruelty and misery. No; it is not money, nor location, nor rich furnishings, nor culture, that give the home its charm, however desirable these may be. It is the affections which cluster there. It is the love which understands the wishes of each member of the home-circle and gladly renders every needed service, which finds its highest joy and truest peace in the presence of its loved ones—this is what really makes the home.

Home is the one place in all the world where hearts are sure of each other. It is the place of confidence—the place where we throw off the reserve which the outside world compels us to wear, and pour out the spontaneous utterances of the full heart. Though our work may be hard, though trials and losses may come, if our home is left to us, we may still be thankful and glad. We may add to it little touches of beauty, expressions of our taste and fancy, surround it with flowers and trees, and make it still more dear by our effort to improve and adorn it. Yes, we can make our home "the dearest spot on earth."

### Unhappy Homes

Such is the ideal, the true home. But, unfortunately, some homes do not quite reach this standard and some fall far below it. Some are darkened, now and then, by misunderstanding and indifference; some become the abodes of selfishness and ill will. But each flash of temper, each shadow of distrust, is like the painful symptoms of disease which nature sends as warnings. Well may we heed these danger-signals. It is said that one marriage in nine is followed by a divorce. A woman who brought suit for a divorce was asked in court the other day: "Did you love this man when you were united with him?" "Indeed, I did," was the reply, and then she told of little estrangements and neglects, till at last caresses were exchanged for blows.

### Preserve the Home Affections

How, then, may homes escape such disaster? How may love continue?

By expression. We like to do something for one we love; if we fail to do it, our love languishes. It grows by service. How the mother loves the crippled child for whom she does so much; how the wife loves with unspeakable tenderness the husband whose failing health is her ceaseless care. It is what we give that holds us, not what we receive. If a young man is constantly sending flowers and other little gifts to one he loves before they are married, because he wants to express himself, is it any wonder if his love droops when he suddenly ceases to do such things? If a young woman wishes to wear her prettiest dress when she is to see her lover and if she gladly sings his favorite songs, should she forget to please him when she is his wife? The form of service, what we do for another, may change, but it must not cease. How short-sighted are those people who have kind words and kind deeds for everyone but those they love. There is no place where courtesy is of more value than where it seems superfluous. Why should our work or our business crowd the best things out of our lives? Shall our hearts be so filled with plans and bargains and daily cares that those in our homes are forgotten?

### Mutual Trust

Moreover, love implies trust. The grocer may put a "No Trust" sign in his window, but there is no room for it in his home. Distrust quickly saps the foundation of any home. Love confides its future with its present. It believes in the justice and kindness of the one it trusts. It follows him for better or for worse. But distrust is a spy. Evil itself, it is looking for evil. If it does not find it, it creates it. A jealous glance, a hasty word, has estranged the best of friends and brought bitterness into the heart. Nagging, trivial criticism of conduct or motive, ill-tempered argument and discussion, are like the dropping of the water that wears away the stone.

### Comrades

Better, far better, for husband and wife to be comrades, sharing each other's pleasures, bearing each other's burdens. Happy is that home where companionship, the mere presence of each with each, affords perpetual peace—where husband and wife have learned the joy of planning as well as working together. The glow and caresses of the young husband's devotion will necessarily change; his work and his larger responsibilities call for his time and his manhood. But his tenderness will grow deeper, his thought for those he loves will become stronger and far-sighted as he feels the comradeship of one who trusts and stands ready to share in every perplexity. And the wife will find absorbing joy in helping to solve hard problems or to bear life's disappointments.

### Partners

Every interest of her husband which the wife can grasp is also her interest and may become a new bond between them. His welfare is her welfare, and a frank discussion of plans cements their union and doubles the strength and joy of their united life. The husband will not unexpectedly find long lists of items charged to him at the store; the wife will not suddenly learn with dismay that her husband has been drawn into some dubious financial risk. How much easier to economize when the need is mutually understood.

[CONCLUDED ON PAGE 22]


# I'm the "Thin Model" Alarm Clock

**Look** for me in your jeweler's window. Then go in and hear me ring "The National Call to Breakfast." You'll recognize me at once by my "tailor-made" appearance; my beautiful "*thin model*," *watch style* case and my big, open, smiling face.

My bell isn't *alarming*. It's *cheerful*. I wake you pleasantly—like sunlight does in summer—even on the *darkest, coldest mornings*.

I ring at intervals for 15 minutes or steadily, as you choose.

And I wake you *on time* for I'm *watch-accurate* as a *timekeeper*.

I've got a regular watch *escapement*—the mechanism upon which a watch *most depends* for its time-keeping qualities. You'll notice that I tick *fast, evenly and lightly* like a watch instead of slowly and heavily like common alarm clocks.

I must *run* like a watch for six days and nights in my factory under careful inspection before they will let me *go to the jeweler*.

I was designed by a Swiss, and I'm made in a factory that's been running for the past thirty years. I'm the result of all that experience and all those facilities.

An inner casing of steel gives me great strength and makes me *dust-proof*.

I'm to be found only at jewelers. Ask yours to introduce me to you today. My price is $2.50. It could easily be $3.00 and you'd willingly pay it, for once you see me *you'll know* I'm worth it.

If you want to be "first in the field" get me—Big Ben—to wake you in the morning.

# BIG BEN

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# THIS AIR-RIFLE

## Yours for a Favor

A YOUTHFUL CRACK-SHOT

THIS is the wonderful King Air-Rifle. It is a Repeater—shoots 150 times without reloading. It is just the rifle for a Boy. Here is your chance —**you can get it without cost.**

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Any boy would be happy to get this rifle. We are glad to help every boy get one—without having to pay a cent for it.

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## How to Get This Rifle

You can get one, too, without spending a penny if you will do a little work for it. Just write a post-card to-day to the Rifle Man —say you want to earn a rifle. He will be glad to help you.

**The Rifle Man, Farm and Fireside**
**SPRINGFIELD, OHIO**

# Betty's "Zoo"

## And the Part It Played in Betty's Rescue

By Louise D. Mitchell

"I AM MARBURY, you're the meanest, the hatefullest, the most contemptible old—old—" floundering around for a character bad enough to suit the occasion, "rhinoceros, I ever heard of, and I just hate, hate, *hate* you with all my might and main!"

And if she hadn't been sitting down in the boat at the moment, oars in hand, ready to pull away, it is safe to say that she would have stamped her little foot with a vehemence strong enough to leave no doubt as to her intention of having it act as "first aid" to a temper long since past boiling-point.

As it was, her tormentor continued the occupation that had drawn forth her wrath with as imperturbable a manner as though she had merely been making some casual remark about the weather. Fact is, he was calmly tying the boat, in which she was seated, fast to the stake from which, despite his urgent request to her to the contrary, she had just as calmly loosened it. And he was tying it, too, with one of his "trick" knots that no one but himself knew how to undo.

"Don't you DARE to tie that boat, sir! Don't you *dare!*" she called out again sharply.

"All right," said the "rhinoceros," soberly, "I won't. It's tied. What are you going to do about it?" And having completed his task, he stood erect to his tall height and gravely regarded her.

"Oh, I hate you! How I do just *hate* you!" she burst out with an angry sob as a keen sense of her helplessness against his superior advantage came crushingly over her.

"Seems to me I've heard that statement before," he said, looking meditatively off into the distance as though trying to recall just where he had heard it. Then, after a moment, looking up brightly: "Oh, yes. I remember, now—*you* said it, didn't you? And you finished up that you 'hated me with all your might and main.' Reminds me of the story of the man who 'ran with all his might, and the lion with all his mane.' Funny coincidence, isn't it?"

But she had turned her back upon him and sat looking out over the water in dignified silence. He waited a few minutes and then:

"I say, Mrs. Noah," he inquired with a great show of interest, "when are you going to march us 'two by two' aboard the ark? Your zoo, I mean?" he added as though she had asked for an explanation, which she hadn't. "You see, I came home from college on Saturday. On Sunday, about four P. M., you informed me that I had sneaked up to the hammock where you were reading with the slyness of a *fox*. At eight o'clock that same evening when I told you you were the prettiest girl in the world—I really couldn't see plainly in the dark on the porch, you know!—you told me not to be an idiot—don't mind if that *is* an indication of the descent of man!—and yesterday when I asked you if you liked me as much as you did before I went away, you requested me not to be a *goose!* And, now, here, to-day, not ten minutes ago, you placed upon me the double burden of being not only a *rhinoceros,* my dear Betty, but an *old* one at that. Seems to me I'm pretty well loaded up by now, Mrs. Noah. Don't you think so?"

No answer.

"Makes me feel," he continued airily, "a good deal like that 'wight' who did on the shore recite in a singular minor key:

"Oh, I am a cook and a captain bold,
And the mate of the *Nancy* brig,
And a bo'sun tight, and a midshipmite,
And the crew of the captain's gig!"

He carried a 'full house.' So do I."

"Oh," whirling around upon him in a fury of exasperation, "you're such a—such a—" but she got no further, for, with a sudden droll cry—a "cross" between the bray of an ass and the hoot of a night-owl—full of pretended horror and fright, he staggered back from her and fell with good dramatic effect full length into the tall grass about ten feet away and lay there motionless upon his back, invisible all but the pointed toes of his russet shoes which stuck up through the grass like the wide ears of a portly rabbit.

In spite of herself a little tremble of laughter would curl the corners of her pretty lips, but in order to steel herself against its temptation, she picked up the magazine which had fallen from her lap in her first angry protest against his interference.

Twenty minutes of complete silence passed thus. Then, suddenly, the old wrath against him stirred in her heart again. How dared he do it! And now he was calmly lying over there well assured that he held her prisoner! How dared he!

After a while she stole a glance around toward The Shoes. There was a peculiarly quiescent something about them that suggested *sleep!* Listening intently she heard a deep-drawn breath with a crescendo-fortissimo attachment. She smiled gleefully.

Then with a stealthy movement she studied the knot. But its intricacies appalled her. Not so the other end of the rope tied to the ring in the bow of the boat. No "trick knots" there! A few moments later and she had lifted an oar and pushing against the bank sent the boat spinning out into the river and freedom!

Now, whether it was the stirring of a belated conscience or the cold and clammy body of the hop-toad that, unexpectedly to both, landed upon his sun-heated face, I cannot say, but suddenly this living picture of "Asleep at His Post" awoke with a start and the whole of Betty's "zoo" sat up together in a simultaneous confusion, but the next instant its active mind had taken in the situation at a glance.

But, curiously enough, instead of chagrin at his defeat filling his mind, his bronzed face turned to a ghastly whiteness and for a full moment he stared in an attitude of frozen horror. Then, with a mighty bound he was on his feet and running like a shot along the river-bank.

"Betty!" he shouted, as he got up even with her, and making a trumpet of his hands that his words might more quickly reach her a half mile away. "Listen, seriously, dear heart! Pull, as though all the devils in hell were after you, straight in here toward the shore, for, oh, my darling! *the dam went down last night!*"

He saw her startled, comprehensive glance at the stealthy, treacherous current and then her face turned toward him in a mute appeal for help. And what help could he give her? Nothing! Neither boat, nor stick, nor board, nor any earthly thing that he could use was to be seen. She was too far out for him to swim to her aid and the boat was moving so swiftly that it would be a mile away from him before he could take even a dozen strokes.

In his mad anguish he beat his head like a crazy man. He now had to run in order to keep up beside her. Heaven! Heaven! *This* for his accursed folly in trying to tease her into subjection instead of telling her his real reason for not wishing her to go out that afternoon!

It was in the midst of this suffering that he heard her calling to him excitedly and looked up to see her pointing to something in the distance. And then with a sob of joy he saw a great tree lying full length out into the river and stretching almost half across its width!

He was never afterward able to explain how he accomplished the feat—he claimed that he fell on the air and slid along on a current!—but he reached that blessed fallen giant far in advance of the boat and was running like a squirrel out to its tip where its massive arms stretched out toward the oncoming boat, a very haven of safety!

There was a heavy thud as the boat struck the tree, and tree and man swayed and swung around dangerously with the impact, but both held firm, and standing in water half-way up to his knees he reached over and took the sobbing girl into his arms.

It was difficult work making his way back through the swirling water and numerous branches, but he landed safely and let his burden slip to her feet, though he still held her fast locked in his arms. It was some moments before he could speak, then all at once he became aware of Betty's silence and her choking sobs.

"Why, don't cry, sweetheart," he said tenderly. "Don't cry! See, you are safe and sound now, for," with a broken laugh, "your whole blamed circus has got you, Betty, child, and it's never going to let you go again, so help me! No, not if you *have* just added a couple of *dears* to it!"

# To Drive Dull Care Away

### How to Oblige

"DEAR teacher," wrote little Johnny's mother, "kindly excuse John's absence from school yesterday afternoon, as he fell in the mud. By doing the same you will greatly oblige his mother."—Comic Cuts.

### The Spelling-Bee

AMOS—"We had a spellin'-bee in th' church parlors last night and I wuz in th' contest."

SILAS—"Haow did ye come out?"

AMOS—"I got stung."—C. C. M.

### The Home-Maker

"YOU say you once had a home?"

"Dat's what I had," answered Plodding Pete.

"Why didn't you do something to make your folks comfortable and happy?"

"I did. I left."—Tit-Bits.

### Just as He Thought

A SMALL boy was reciting in the geography class. The teacher was trying to teach him the points of the compass.

She explained: "On your right is the east, your left the west, and in front of you is the north. Now what is behind you?"

The boy studied a moment, then puckered up his face and bawled: "I knew it. I told ma you'd see the patch in my pants."—Harper's Monthly.

### Lost From His Crowd

A CORNISHMAN visited London and was gazing into a shop-window and obstructing the foot-path. A cockney stumbled against him, and seeing that he was from the country, said to him, "My man, have you seen a wagon-load of monkeys pass down the street?"

"No—o," Cousin Jack replied, "faaled out of the wagon, ded ye?"—The People's Popular Monthly.

### A Modern Visionary

POST—"Thompson claims that he once saw a vision."

PARKER—"Blonde or brunette?"—W. L. Wildway.

### Lucky Oxen

ONE winter evening the newspaper announced "One Thousand Ox-Tails for Sale at the Public Market."

Little Mary looked much distressed and sat thinking for several minutes. Pretty soon her face brightened, and she said, "Well, it's nice for the oxen it isn't fly-time, anyway."—Beulah Rector.

### A Duet

SOPRANO was Miss Perkins,
A basso Mr. Brown;
They sang duets together—
while
up he
went went
She down!
—Harold Susman.

### Pathetic Proof

"MY JIM is dead, my Jim is dead," wailed an old colored mammy, holding up a letter. "Here is a letter from him right from the dead-letter office!"—Nettie Rand Miller.

### Untactful

IT WAS the celebration of Willie's fifth birthday, and he and his little guests sat around the festive table eager to begin the feast, when the host's sister, a comely spinster, marched in bearing aloft a frosted cake, out of which flared five colored candles.

Murmurs of admiration and awe followed from all sides of the table, and as sister placed the cake squarely on the cloth and drew back, Willie turned his blinking eyes from the five candles and said, enthusiastically:

"Sister, if this was your birthday the whole room'd be ablaze, wouldn't it?"—Harper's Monthly.

### A Cautious Lender

The Boy—"Miss Bibbs said that you could borrow her washboard and boiler, and welcome, Aunt Matildy; but she hoped to goodness you wouldn't feel like keepin' 'em so long that you'll be ashamed to bring 'em back."

### Notes for a Chorus Girl

A POPULAR soprano is said to have a voice of fine timbre, a willowy figure, cherry lips, chestnut hair, and hazel eyes. She must have been raised in the lumber regions.—Lippincott's.

### A New Market

AMBITIOUS AUTHOR—"Hurray! Five dollars for my latest story, 'The Call of the Lure!'"

FAST FRIEND—"Who from?"

AMBITIOUS AUTHOR—"The express company. They lost it."—Hamilton Pope Galt.

### A Weighty Decision

"DID you make those biscuits, my dear?" asked the young husband.

"Yes, darling."

"Well, I'd rather you would not make any more, sweetheart."

"Why not, my love?"

"Because, angel mine, you are too light for such heavy work."—The People's Popular Monthly.

### Sigsbee and the Burglar

IT WAS two o'clock in the morning of the birthday of young Charlie Sigsbee, son of Admiral Sigsbee. Charlie rushed into the admiral's room, grasped him convulsively by the shoulders, and hissed into his ear:

"Wake up! Wake up! There's a man in the house!"

The admiral, true to his martial instincts, leaped out of bed, grasped his deadly marine revolver, batted his eyes in expectancy of a bloody encounter, and asked his son:

"Where is he?"

"Here he is," said Charlie, with all the effectiveness of melodrama, "I'm twenty-one to-day."—Popular Magazine.

### Explained

INDIGNANT DINER—"Look here, waiter; I just found a button in this dish of roast turkey."

CALM WAITER—"Yes, sir; it is part of the dressing."—Harper's Bazar.

### According to Rule

"HOW is your mother this morning?" asked Mrs. Gray of the small boy who came with the milk.

"She's better," he answered.

"Can she sit up?" went on Mrs. Gray.

"No," answered the literal youngster. "She sits *down,* but she stands *up.*"—M. S. P.

### A Modern Linguist

THE class in English was being taught the intricacies of forming adjectives from nouns by the addition of -ous. Examples were given, such as hazardous from hazard, meaning full of hazard; contemptuous, full of contempt; venturous, full of venture, etc. Then the class was asked to give examples of their own.

"I have one, sir," piped up little Reginald.

"What is it?" asked the teacher.

"Pious, full of pie," beamed the scholar.

### A Good Shot

"PAW wants a bottle of liniment, and maw wants a bottle of china-cement right away."

"All right, sonny. What's wrong?"

"Maw hit paw with the sugar-bowl."—Judge.

### In for It!

FIRST SMALL BOY—"We'd better be good."

SECOND SMALL BOY—"Why?"

FIRST SMALL BOY—"I heard doctor tell mother to take plenty of exercise."—C. A. Bolton.

### An Afterthought

SHE used to be a pensive maid,
But now, upon my life,
Since we are married, I'm afraid
She's an ex-pensive wife.
—S. S. Stinson.

# OUR YOUNG FOLKS' DEPARTMENT

Conducted by Cousin Sally

## The Letter-Box

DEAR COUSIN SALLY—

I received my club pin Wednesday, and was very glad to hear from you. I am very much pleased with it. I think the motto is very good. I should be very glad to exchange cards with any of the cousins. I live in the town of Ould Newbury, which was settled in 1636. Among the first settlers was the Reverend Mr. Parker, who sailed up a small river here which takes his name. At that time the town was a dense forest, but now it is a flourishing town. My home is situated near the banks of the Merrimac River. I live only one mile from the city of Newburyport.

A very short distance from my home is a boulder which marks the place where Benedict Arnold, the traitor, and his men camped overnight on their way to Quebec.

I will close, with love to all the cousins.

IDA RUSSELL, Age Thirteen,
19 East High Street,
Newbury, Massachusetts.

DEAR COUSIN SALLY—

I send five cents for a button, as I wish to join your club. We have taken your paper for several years, and I always read your letters. I live in the northwest corner of the United States. There is a large stone monument near us that marks the boundary line and the northwest corner. We are surrounded on three sides by water and on the north side by British Columbia. The chief occupation of the people is fishing. There are a great number of fish-traps in Puget Sound. There are two fish canneries on the Point. During vacation the older children work in the cannery. I could write many interesting things about the fishing industries, and wish you all could be with me on a trip up the beach after shells and sea-mosses, and go bathing in the salt water. I am almost fourteen years old, and am in the seventh grade at school.

Your cousin,
MYRTLE PETTIT,
Point Roberts, Washington.

DEAR COUSIN SALLY—

I will write and tell you I received your beautiful button some time ago. I would have answered sooner, but I have been so busy at school lately that I have spent my evenings other ways.

My little brother also received his button and thinks it is very pretty. He also likes the motto.

I would like to correspond with some of the cousins.

I live on a farm, and my father has about forty head of cattle and seven horses. He raises enough hay and grain to feed them and sells quite a bit, besides.

I am in the fifth and sixth grade. I started when I was seven.

Your page would be better, as you say, if we had older stories. I am not very old, but I would like older stories.

Your sincere cousin,
ETHEL WELLS, Age Eleven,
R. F. D. 2, Kalispell, Montana.

DEAR COUSIN SALLY—

We have been taking FARM AND FIRESIDE for about three years. I have been reading the letters from the cousins, and thought I would write to you. I live in the country, about six miles from Emporia. It is not a very large town. I go to school and will be in the fifth grade next year. Our school closed last Friday, and it seems lonesome, for I like to go to school.

I would like to join your club, so please send me a club button. I would love to exchange post-cards, and will answer all I get if they have the address on them.

With love to all,
Your cousin,
MARJORIE JOHNSON, Age Eleven,
R. R. 3, Emporia, Kansas.

DEAR COUSIN SALLY—

I always read the letters which are in FARM AND FIRESIDE and enjoy them very much; so much, in fact, that I want to join your club and enter your contests. I have always longed to join some club, and at last I have found one. I have looked at the clubs of the other farm papers, but I find none I like so well as yours. Therefore, I send five cents for which please send me a club button.

I have quite a few pets. I have seventy-five little chicks, two pigs, three lambs and a horse named Betsy. I love to ride horseback. I am thirteen years old, and would like to exchange post-cards or letters with any of the cousins.

With love to all the cousins, I am,
Your little cousin,
MARY EDELBROCK,
R. F. D. 3, Cloverdale, Ohio.

# The Fakir of Bagdad

## By Izola Forrester

ONE day, when the Caliph of Bagdad and his retinue were passing along the market-place, they saw a strange fakir sitting cross-legged under the shade of a date-palm. He seemed to be asleep, and around his neck was suspended a curious-looking tray of metal, whereon stood a casket of brass, filled with many fine holes like a sieve.

"Waken, slave," cried the caliph. "What is in thy casket?"

Then the fakir opened his eyes, but he did not rise nor kneel as the custom is. He smiled and folded his hands over the casket.

"Light of the land," he said, "the casket contains all my wisdom and all my riches, and by its magic art I could sit upon thy royal throne in less than one minute if I cared to."

"Surely this is a dangerous fakir," said the caliph to his grand vizier in a whisper; "we must not make an enemy of him."

Then he made friends with him, and invited him to the royal dwelling and gave him slaves and all that his heart desired. And the fakir said little. He smiled all the time, and never let the little brass casket out of his sight for one moment.

"Let me see what it contains," said the caliph. "I will give you the hand of my youngest daughter in marriage if you will but let me see what it contains, oh, fakir."

"I dare not look upon it myself," the fakir told him. "If I were to even let your serene mightiness gaze upon it for one instant, you would be turned into some wild beast of the desert, for your heart is the heart of a wild beast of the desert."

"Then let my grand vizier look on it," said the caliph, without being angry, for his curiosity was more than his anger.

"Nay," said the fakir gravely, "he would be turned into a gray ape, for his heart is the heart of a gray ape."

"Then let my youngest daughter look within and tell me what she sees."

"Nay, for she would be turned into a star, for her heart is the heart of a star. That is the magic way the little box has. Yet it is the most wonderful little box in the world. If you know what words to say to it, it will grant you anything you may wish for."

"Where did you get it?" asked the caliph.

"I was asleep in the desert," said the fakir, "and I heard the sound of wings, and I wakened and saw a white dromedary with trappings of gold and with wings like a griffin. And it knelt upon the sand before me and panted heavily. And I saw there was an arrow in its shoulder, so I plucked it out and healed the wound, and for my kindness it gave me this casket. It is called the casket of Heart's Desire."

"Surely we must do all this fakir wishes," the grand vizier whispered to the caliph, "else he will turn us into whatever he wishes by the art of his magical casket, and he will seat himself upon thy throne and will wear the crown of thy fathers."

"We will give him our youngest daughter and make him our son," said the caliph. "We will give him one of the royal palaces and ten elephants laden with gold and silver, and perhaps he will be satisfied."

Then the fakir smiled when he heard it, and said he would be satisfied. And he lived years and years in the royal palace, and was treated as the caliph himself, and when he died, the caliph said, "At last, we may open the casket and see what it was that gave him power over all the land."

So they brought the casket and set it before the caliph, and he unlocked it and raised the cover, and there was nothing in it. It was bare as the inside of the caliph's tomb. And they remembered the smile of the fakir.

"Surely," said the caliph, "we have been fools, and the fakir was the wisest man in the kingdom. When a man is afraid, he will do anything, but when he is afraid of that which he cannot see, and of which he knows nothing, then he is a fool. Give the casket to my youngest daughter, the fakir's wife, for he would not even tell her the secret of what it contained."

"'Waken, slave,' cried the caliph. 'What is in thy casket?'"

## Cousin Sally's Club

OUR club has been organized for all the boy and girl readers of FARM AND FIRESIDE. If you are no older than seventeen, you are eligible for membership. To be a loyal member of the club, you must promise to be brave and fearless, to tell the truth always, to be kind to animals, never to say unkind things about people, to always try to say kind things, to lend a hand whenever you can and many other things which you won't find very hard to do once you get into the habit of doing them. Then a loyal member must try his best to compete in our monthly contests. Our club button costs only five cents. Its colors are blue and white, and the monogram, C. S. C., has a double meaning—Cousin Sally's Club and the club motto, which is— Ah! but that is a secret, which only club-members may know. So hurry along if you want to share our secret. When joining, give your name, age and address, and write to Cousin Sally's Club, 381 Fourth Avenue, New York.

## The Lost Key

By Emma Petersen, Age Fourteen

FAR up in the old mill, dusty and crumbling with age, little Lois was playing. She knew that her mother did not approve of her playing there, as the floor was decayed and at any time might break in and she would go down into the rushing water below. With a quick impulse, she decided to lock the door leading into the old grain-rooms and then she would be secure.

For a long time she hunted for the key, and finally found it in an old box high up on the wall, far above her reach. She ran out in the outer room and seized an old box and brought it into the room. She climbed upon it and could just reach the key by holding onto the box above her. She ran to the door and with much labor got it to turn on its rusty hinges. She slipped the key into the lock and turned it slowly. She then returned the key and started to amuse herself by gathering the dust and grains of wheat left there and dropping them through a large crack in the floor and watching the water carry them off to the whirlpool just below the falls. She laughed in glee when the spray from the water falling over the wheel fell on her dimpled face and golden curls. Soon she saw it was getting dark, so she decided to go home.

Again she climbed upon the rickety box and had just gotten hold of the key, when the nails holding the box up came out and she fell with a crash to the floor. She jumped up and began to look for the key. It was balanced on the edge of the crack, and, as she bent to pick it up, the floor swayed, and slowly it slid and fell into the water below. Fascinated by the whirling water, she watched it until it sank in the whirlpool, and finally she fell asleep.

When she awoke, she went to the door again and tried hard to open it. But it was closed fast. She cried out, hoping her mother would hear her. Suddenly she remembered with a shock that her mother would not be home, that she would be in another city visiting a friend. She told Lois to go to sleep and not bother her father when he came in tired from the day's work. The night had turned cold and she cuddled up in one corner and sobbed herself to sleep, while the moon's cold rays shone through a hole in the roof and fell over her pale, tear-stained face.

Late that night her father moved softly so that he might not disturb his little daughter as she slept, and waited for the morning, so that he might see her face opposite his at the breakfast-table. When Lois did not appear next morning, he ran to her room and stood aghast when he saw that the bed had not been slept in.

Slowly Lois opened her eyes. Where was she? She looked around and remembered and understood why her muscles were so cramped. She covered her face with her hands and moaned as she thought of what her disobedience had brought her. Would she ever be found, or would she be dead when they found her? She was so hungry. Just then she heard footsteps, and called. How weak her voice sounded. She sank back again.

The footsteps came nearer and up to the very door. Her heart beat fast. Someone shook the door, but it did not yield an inch, while the floor swayed as if to break. She heard the footsteps retreating, and with terror she tried to cry out, but her voice failed her. But soon she heard the steps again. Someone was raising a ladder to the roof. A small door led into the room from the farther side, through which the wheat had been scooped, and they were trying to reach this. A rope was lowered and she tried to hold it, but her hands were numb. It was drawn up and again lowered. There was a noose at the end of it. She slipped this around her waist, and was drawn up slowly, but surely, to safety, and into her father's strong arms.

## The First Robin's Song

By Ruth Patrick, Age Sixteen

A FLASH of scarlet passed the door,
A song trilled loud and clear,
Undaunted by the cold winds' roar,
Our brave robin is here.
He perches in the apple-tree
And fills the air with song.
Since robin's here we can be sure
Spring will not tarry long.
He brings us thoughts of happy days,
Of summer, soon to come,
And tells us of the flowers in
His sunny southland home.
So hail to Spring's blithe messenger,
Our robin, bold and gay.
He fills the world with brightness
However dark the day.

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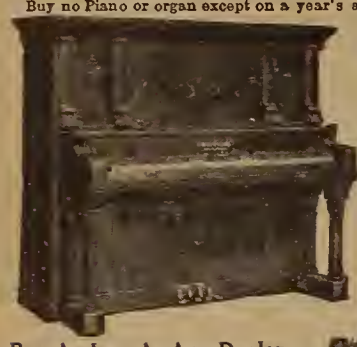

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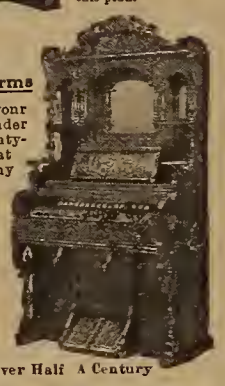

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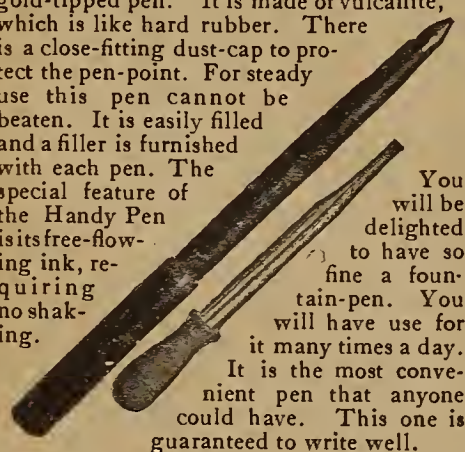

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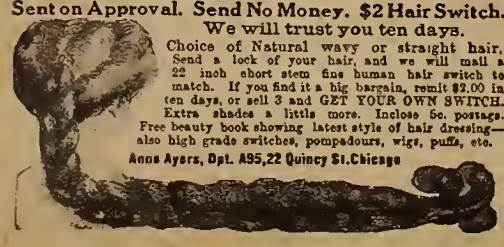


Anna Ayers, Dpt. A95, 22 Quincy St. Chicago

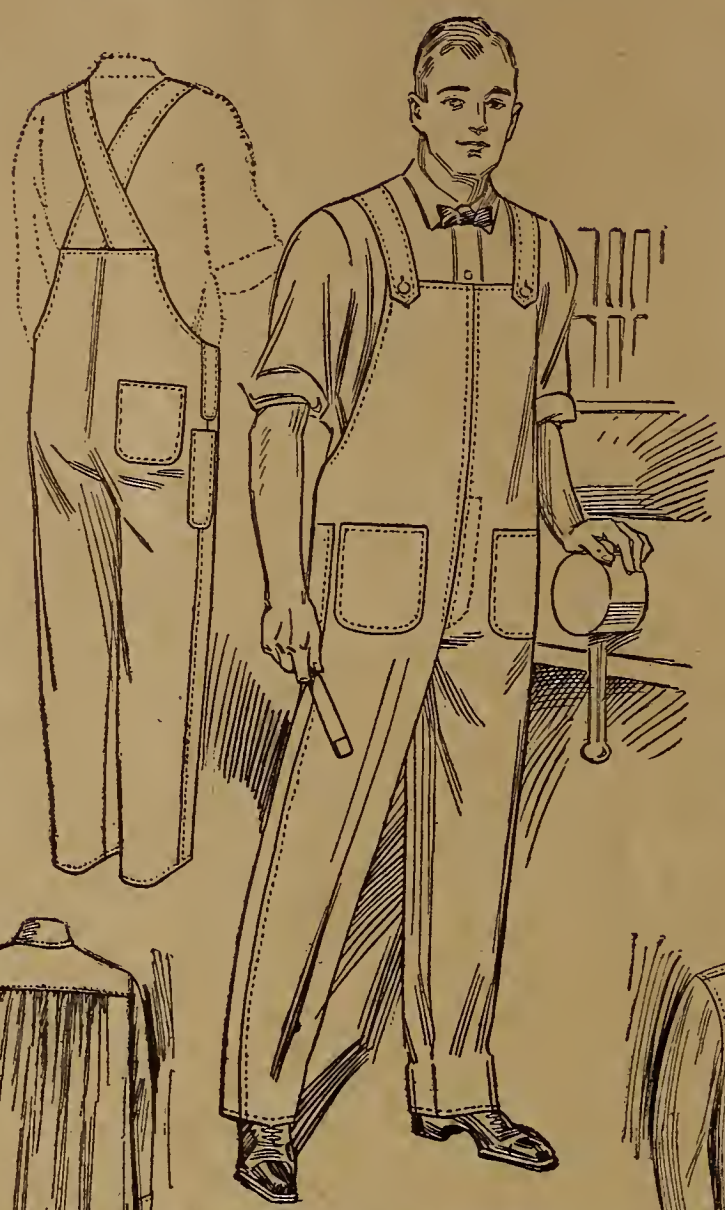
# Practical Patterns for Men and Boys

## Designs by Miss Gould

CONSIDERABLE money can be saved by making the simple men's and boys' garments at home. Not only do they cost less, but they are sure to last much longer, because the materials are usually stronger and the machine-stitching more secure.

On this page are illustrated some clothes which have been designed especially for the man and boy readers of FARM AND FIRESIDE. They will appeal, too, to the housewife and mother who is contemplating making clothes for the big and little men of her family, for they are good-style clothes, and they are practical and simple ones.

The patterns for them are the famous WOMAN'S HOME COMPANION patterns, which every FARM AND FIRESIDE woman reader who has tried them knows are perfectly satisfactory. They are inexpensive patterns, too, as they cost but ten cents apiece and are often so adaptable that two or three entirely different-looking garments may be made from one pattern only. It is only the sets of patterns that cost more than ten cents.



No. 1800—Men's Overalls

Pattern cut for 32, 34, 36, 38, 40, 42, 44, 46 and 48 inch waist measures. Quantity of material required for medium size, or 42 inch waist, five yards of twenty-seven-inch material, or three-and-one-eighth yards of thirty-six-inch material. Overalls should always be made of a good heavy material that will stand hard wear. Galatea, ticking and denim are all serviceable materials, and such colors as dark blue or gray should be selected. To make these overalls especially durable, it is advisable to have a double seat securely stitched on the under side

SAILOR suits are the most satisfactory clothes for small boys, for they are stylish and trim-looking, and at the same time are easily laundered.

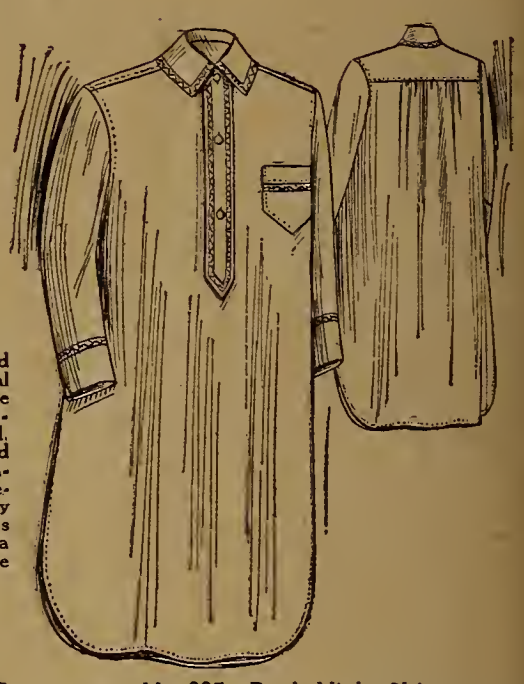
The design in pattern No. 1803, illustrated on this page in the lower right-hand corner, is a very good one. By using different colors and materials and the two collar styles, half a dozen suits, which will be all a boy needs, even in wash fabrics, can be made from this one pattern, and each suit will look entirely different.

The same is true of the pattern for the men's negligée shirt shown on this page in No. 1802. Half a dozen shirts may also be made from this pattern and each one will look different if materials in different colors and designs are used.

This shirt is made with a yoke at the back which adds to its wearing qualities, and the sleeves are finished with the regular negligée-shirt cuffs. It is much easier to make night-shirts for men and boys than it would seem, and two very good night-shirt patterns are shown in patterns No. 807 and No. 1801.

No. 1801—Men's Night-Shirt

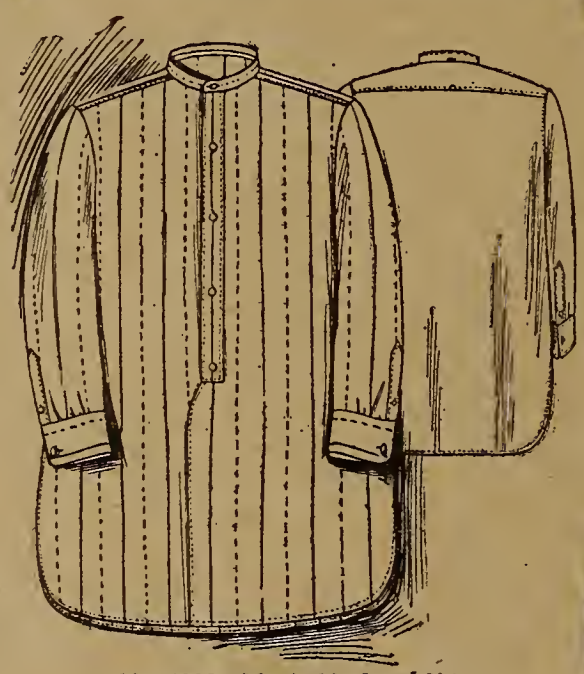
Pattern cut for 14½, 15½, 16½, 17½ and 18½ inch neck, corresponding with 36, 40, 44, 48 and 52 inch breast measures. Quantity of material required for medium size, or 40 inch breast measure, six yards of twenty-seven-inch material, or four yards of thirty-six-inch material.



No. 807—Boy's Night-Shirt

Pattern cut for 8, 10, 12, 14 and 16 year sizes. Quantity of material required for medium size, or 10 years, three-and-one-half yards of twenty-two-inch material, or three yards of thirty-six-inch material. Boys' night-shirts are made just like the men's, though, of course, in smaller sizes

There is nothing more practical made than a Woman's Home Companion pattern. If you are in doubt about this, just try one of the patterns illustrated on this page. They are perfect in their grading, each piece is lettered and they are most simple to use



No. 1802—Men's Negligeé Shirt

Cut for 14, 14½, 15, 15½, 16, 16½, 17, 17½ and 18 inch neck measures, corresponding with 34, 36, 38, 40, 42, 44, 46, 48 and 50 inch breast measures. Material for medium size, or 16 inch neck measure, three-and-one-fourth yards of thirty-six-inch material

If you have forgotten to order the Spring Catalogue of Woman's Home Companion patterns you should do so at once. It is just the guide to good dressing that every woman needs. The catalogue may be ordered from our pattern depots and costs but four cents

No. 770—Boy's Overalls

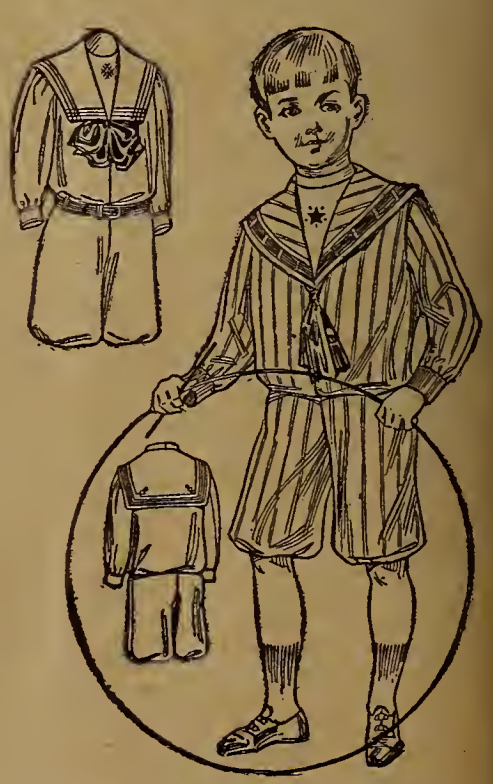
Pattern cut for 2, 4, 6 and 8 year sizes. Quantity of material required for medium size, or 6 years, two-and-one-half yards of twenty-seven-inch material, or two yards of thirty-six-inch material. It is advisable for even very small boys to have two or three pairs of good strong overalls, for they are a great saving in clothes

### How to Get the Patterns

If you want clothes for the men and boys in your family, WOMAN'S HOME COMPANION patterns are just the patterns to use in making them, for they are practical and simple as well as perfect patterns. We supply them for only ten cents apiece. They may be ordered from FARM AND FIRESIDE, 381 Fourth Avenue, New York City; Springfield, Ohio, or 1538 California Street, Denver, Colorado.

### A Premium Offer

To any FARM AND FIRESIDE reader who sends us one new subscription to FARM AND FIRESIDE, with fifty cents for the same, we will give as a premium for the subscription one WOMAN'S HOME COMPANION pattern. To obtain a pattern without cost, send the subscription to FARM AND FIRESIDE, Springfield, Ohio.



No. 1803—Sailor Suit—Blouse in Two Styles

Pattern cut for 4, 6, 8, 10 and 12 year sizes. Material for medium size, or 8 years, four yards of twenty-seven-inch material, or two-and-three-fourths yards of thirty-six-inch material, with three-eighths of a yard of contrasting material for the shield. Galatea, gingham, duck and flannel are good materials for this sailor suit

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# A SET OF UNDERWEAR PATTERNS

## HOW FIVE GARMENTS CAN BE MADE FROM TWELVE YARDS OF MATERIAL

**A practical, inexpensive but attractive underwear set**

Even the woman who makes her own clothes and is accustomed to using patterns is sometimes a bit extravagant in the way she uses her material. There are apt to be so many little useless scraps left over just because she has not first carefully thought out the most economical way of laying and fitting in the pieces of the pattern on the material.

Now here is a suggestion for the woman who is in need of some new underwear and who wants to have it dainty, but who wants also to spend as little money as possible in its making.

To begin with, she can save a little in the cost of the patterns. If she buys the set of five garments illustrated on this page, she can procure them for thirty-five cents, while if she bought each of them separately, they would cost ten cents each—fifty cents.

Then there is the long cloth. If she purchases this by the piece of twelve yards, she can frequently get it at a special price and not have it cost more than one dollar. Here is another important point for her to consider. If she makes one garment at a time and cuts it out separately, she will use up more material in making five garments than if she plans them all at once and carefully fits in the different pieces of the patterns on the material at the same time.

For instance, in the patterns illustrated on this page, if each one of the garments were made separately, it would require fifteen yards of long cloth, but by following the directions given on this page and cutting out all the pieces at the same time, only twelve yards of long cloth are required. So, you see, three yards have been saved, for the entire five garments can be cut out of twelve yards of long cloth if the pattern pieces are laid on the material exactly as they are shown in the directions on this page.

These underwear patterns were specially designed for the woman who cannot spend too much time in making her clothes. Each pattern is practical, and though the garments are very simple to make, yet they are dainty and pretty. The petticoat is cut to follow the lines of the new dress skirt. It is a scant five-gored model made with no darts and finished at the waist with a narrow circular facing through which a tape may be slipped, tying at the back. The deep flounce may be of embroidery or lace, or the skirt can be finished with a flounce made out of sheer white lawn or cross-barred dimity, which would be especially pretty. The skirt pattern is given full length and finished with a hem, so the flounce may be as wide or as narrow as you care to make it.

The French chemise is semi-fitted so that it will not take up too much room. There is a seam at the back to the waist-line, and then below the waist there are two flat plaits. This chemise will be very dainty and pretty if the upper part is hand-embroidered in a simple design and ribbon is run through the beading which outlines the low neck and the armholes. If, however, time must be considered in making this chemise, the embroidery may be omitted and the chemise simply finished with a band of beading and lace edging at the neck and around the armholes. Ribbon run through the beading makes an effective finish.

The plain, fitted corset-cover has seams to the shoulders, and is a very good design for a stout woman. It is cut square at the back and V-shape in front, buttoning through a narrow box-plait.

The circular drawers are dart-fitted and fit as smoothly over the hips as the petticoat. They are open drawers and are trimmed with ribbon-run beading and a ruffle of either embroidery or lace.

The nightgown slips over the head and is the simplest kind of a gown to make. There are no buttonholes, no front opening, and it may be drawn up quite close at the neck if you do not care for a very low-neck gown.

If a simple gown is desired this design can be finished at the neck and sleeves with a beading to run the ribbon through, trimmed with just a narrow edging of German or imitation Valenciennes lace.

It can be made a bit more attractive by adding a touch of hand-embroidery to it in the same design as that used for the French chemise. This set of patterns may be ordered from any of our three pattern depots: Farm and Fireside, 381 Fourth Avenue, New York City; Springfield, Ohio, or 1538 California Street, Denver, Colorado.

### No. 1762—Scant Five-Gored Petticoat

Pattern cut for 22, 24, 26, 28, 30, 32, 34 and 36 inch waist measures. Quantity of material required for medium size, or 26-inch waist, two-and-three-fourths yards of thirty-six-inch material, with two-and-three-fourths yards of embroidery for the flounce

### No. 1269—Dart-Fitted Circular Drawers

Pattern cut for 22, 24, 26, 28 and 30 inch waist measures. Quantity of material for medium size, two-and-one-fourth yards of thirty-six-inch material, with three-and-one-half yards of lace and two yards of beading

### No. 1460—Nightgown With Round Neck

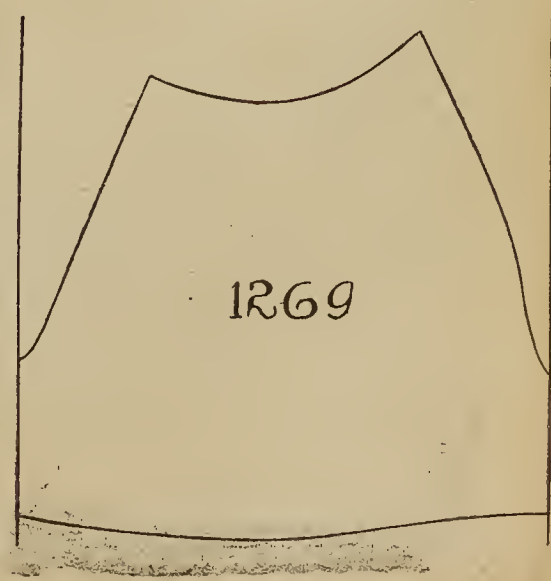
Pattern cut for 32, 36 and 40 inch bust measures—small, medium and large. Quantity of material required for medium size, or 36-inch bust, six-and-one-fourth yards of a thirty-six-inch wide material

### No. 1642—French Chemise

Pattern cut for 32, 34, 36, 38, 40 and 42 inch bust measures. Quantity of material required for medium size, two-and-one-half yards of thirty-six-inch wide material

### No. 1461—Fitted Corset-Cover With Seams to the Shoulder

Pattern cut for 34, 36, 38, 40, 42 and 44 inch bust. Quantity of material required for medium size, or 38-inch bust, one-and-one-fourth yards of thirty-six-inch material

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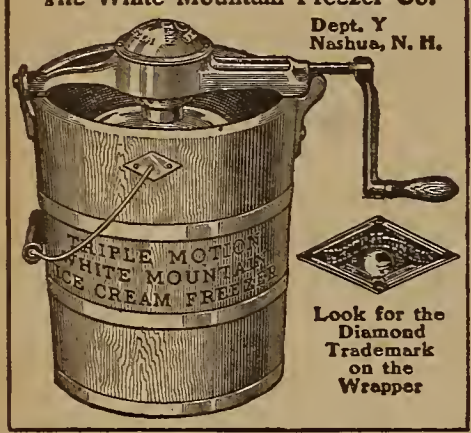


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Macbeth "Pearl Glass" lamp-chimneys bring the right balance of draft to the flame, and let the light shine without hindrance.

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# A Wedding Luncheon

## With Suggestions of What to Serve and How to Serve It

THE girl who expects to be an early summer bride is sure to be just about the busiest girl, to say nothing of the happiest girl, you can think of these days. Whether her wedding is to be in church or at home she wants to have a little wedding breakfast or luncheon for her friends who have been invited to the ceremony. She wants this wedding luncheon to be just right and yet, generally speaking, she wants it to be simple.

It is wise for the girl who is turning her thoughts to a luncheon of this sort to remember that it is never well to attempt more than can be carried out easily.

### Suggestions for Decorating

If the dining-room table happens to be a very good-looking one, use only a centerpiece and doilies, but if it does not seem to be quite up in appearance to the wedding festivities, cover it up with an immaculately white cloth. Of course, you will want some flowers in the way of decoration, and nothing is prettier than roses. Have a center-piece, a low one, of pink roses and then put at each place a single rosebud. Get just as long-stemmed rosebuds as possible and another pretty little touch may be given by tying them with pink gauze or pink satin ribbons.

If the wedding is to take place in June, you can find nothing prettier for the color-scheme of the wedding luncheon and for the decoration of the dining-room than daisies. The white and green idea is always a pretty one. A big straw hat, if it is a fresh one, can be used for the center of the table as a receptacle for the flowers. Place the hat on the table upside down, of course, in the opposite way than it is worn on the head. Use a low jar for the water, just large enough to fit the crown of the hat and then fill this with field-daisies, cutting the stems in different lengths, so that some of the daisies will fall over the brim of the hat and others stand up above the brim straight and stiff. The hat may rest on a bed of ferns and a fern or two may also be used under each plate.

### What to Serve

Now in the way of refreshments there are many simple and appropriate dishes to choose from. It is perfectly correct to serve merely ice-cream and cake, if one does not wish to attempt anything more. But if this is decided upon, be sure that the ice-cream is served in the most attractive way possible and that the cake is delicious.

Banana ice-cream garnished with fruit and served in individual high glasses would be appropriate with the wedding-cake and additional cakes covered with pink frosting. Some candies also carrying out the pink idea would add a pretty touch to the general effect and appearance of the table.

To make the banana ice-cream, remove the skins from four bananas, scrape, then force through a sieve. To banana pulp add one cupful of sugar, one and one third tablespoonfuls of lemon-juice, a few grains of salt and one quart of thin cream. Freeze, using three parts of finely crushed ice to one part of rock-salt which insures

Banana Ice-Cream garnished with fruit

a smooth, fine-grained consistency. After the ice-cream has been put in the glasses, garnish with slices of banana and candied cherries.

For a more substantial lunch have a bouillon in cups and then serve chicken salad with nut sandwiches and coffee.

The nut sandwiches can be made very attractive-looking if the following recipe is used. Taking it for granted that you are familiar with the principles of bread-making, here are the ingredients for making the bread used for these sandwiches. Add the nuts after the first raising, for they have a tendency to hinder this process. The ingredients are one-half cupful of scalded milk, one-half cupful of boiling water, one-half tablespoonful of lard, one-half tablespoonful of butter, three-fourths of a teaspoonful of salt, two tablespoonfuls of molasses, one-half of a yeast-cake dissolved in two tablespoonfuls of lukewarm water, one-half cupful of white flour, enough entire-wheat flour to knead and three-fourths of a cupful of walnut-meats broken in pieces.

The Nut Sandwiches are cut in oval shape and have a garnish of nut-meat halves

Slice this nut-bread, spread with butter and put just a trifle of orange-marmalade between the slices. Shape, garnish with nut-meats, holding the nut-meats in place with a bit of butter, and put on a plate which has been covered with a pretty doily.

If preferred, with this menu, the coffee may be omitted and either a fruit punch or a pineapple lemonade may be served.

### Fruit Punch

To make the fruit punch, use nine oranges, six lemons, one cupful of grated pineapple, one cupful of raspberry syrup, one-and-one-half cupfuls of tea infusion, one-and-one-fourth cupfuls of sugar, one cupful of hot water and one quart of cold water. Mix juice of oranges and lemons with pineapple, raspberry syrup and tea; then add a syrup made by boiling sugar and water fifteen minutes. Turn in a punch-bowl over a large piece of ice. Chill thoroughly and just before serving add water.

To make the pineapple lemonade, use one pint of water, one cupful of sugar, one quart of ice-water, one can of grated pineapple and the juice of three lemons. Make syrup by boiling water and sugar ten minutes; add pineapple and lemon juice. Cool, then strain and add ice-water.

### Swiss Salad

This salad served with plain bread-and-butter sandwiches, and then followed by a café frappé and cake, also makes a delightful menu.

The following recipe may be followed for the Swiss salad: Mix one cupful of cold cooked chicken cut in cubes, one cucumber pared and cut in cubes, one cupful of chopped walnut-meats and one cupful of French peas. Mix with French dressing and arrange attractively in salad-dish. If desired, this salad may be garnished with mayonnaise dressing.

### Café Frappé

This dessert may be made with the white of one egg, one-half cupful of cold water, one-half cupful of ground coffee, four cupfuls of boiling water and one cupful of sugar. Beat the white of egg slightly, add cold water and mix with coffee; turn into scalded coffee-pot, add boiling water and let boil one minute; place on back of stove ten minutes; strain, add sugar, cool and freeze to a mush, using equal parts of ice and salt. Serve the frappé in pretty glasses with whipped cream. This is an attractive as well as a most delicious dessert.

Do not try to make your luncheon too elaborate. Remember that a luncheon should not be so heavy and substantial as a dinner. So have simple things. If your table is attractive, and the food is served daintily, your luncheon will be a success.

If you haven't roses in your garden, and do not feel that you can afford to buy them from your florist, just use daisies instead, as suggested above. They are used extensively at big city luncheons and are considered quite proper. In fact many people, at the present time, are giving them preference to roses.

# "The Dearest Spot on Earth"

[CONTINUED FROM PAGE 17]

Successes are doubly welcome when husband and wife are partners in effort.

Partner the woman assuredly is in every home. What a pity that she should be a "silent partner." If she is thus overlooked, if her judgment and wishes are never consulted, is it strange, when losses come, that her good cheer should fail, that she should wear the old gown with a dejected spirit and that an unpleasant cadence in her voice should betray her failing courage? It is to those who have stood shoulder to shoulder, never pulling apart, that the truest successes as well as the greatest enjoyment have come.

And the happy sunset hours will follow. At the door of many a home sit gray-haired couples, happy in each other's presence, comrades to the last.

### The Young People

And what about the other members of the household? You have seen the good order and beauty of a home transformed in five minutes, some summer day, by the arrival of the young people, who throw hats and caps, sticks and bats, capes and bunches of wild flowers, on the tables and chairs. They throw open doors and blinds, bring pitchers and glasses and set them down regardless of delicate fabrics and neatness. To the mother this confusion is delightful.

If *one* of these young people were a guest in such a home, his manners and thoughtfulness might be fine, but when a bevy of them are together, they forget proprieties, disregard the hours of meals, monopolize the conversation and banish home quiet by their merriment. It may have been in the thought of such a company that a young man in Chicago advertised for a boarding-place where his Christian example would be considered sufficient compensation for his board!

Perhaps some of these young people are students in school or college. When vacation comes, they plan visits with college mates or bring them to their own homes. While the parents' hearts swell with pride as they hear of college successes and see proofs of intellectual improvement, they may miss the old-time ways. The tendency of the young people to associate exclusively with one another is an injury to the family life. The boy and girl should find their models, not among their mates, but among their elders. It is all very well to look forward to a glorious career, but its best promise lies in thoughtfulness for parents and loved ones.

### Cultivate the Love of Home

Make it a joy, an inspiration, a center from which shall radiate light and strength, to which each member shall bring contributions of love and gladness. Fill it with beauty and good cheer; enrich it with happy memories and associations. Make it a school of manhood and womanhood, of gentleness, high motives and Christian character. So shall it yield unceasing blessing and bring strength, honor and permanence to our country.

Between broad fields of wheat and corn
Is the lowly home where I was born.
The peach-tree leans against the wall,
And the woodbine wanders over all.
There is the barn and, as of yore,
I can smell the hay from the open door;
I can see the busy swallows throng
And hear the peewee's mournful song.
Oh, ye who daily cross the sill,
Step lightly, for I love it still.

# The Housewife's Letter-Box

## Do You Need Help?

Have you been looking for a special recipe for years? Do you need any information on household matters? And do you meet with little problems in the home that you wish someone would solve for you—someone who has had a little more experience than you? Then, why not make use of YOUR OWN department and ask the questions which have been troubling you? This department has proved that the spirit of helpfulness is abroad in the land, especially among the women of the farm. That our readers have the mutual desire to help one another is evidenced by the large and prompt response we have had to the questions which are printed here monthly. There is no payment made for contributions to these columns. All answers and inquiries should be addressed to "The Housewife's Letter-Box," care of Farm and Fireside, Springfield, Ohio.

If an immediate answer is desired, it will be sent, provided a two-cent stamp is inclosed.

## Questions Asked

*Will someone please tell me—*

How to clean tan kid gloves?
G. S., Michigan.

A recipe for making small fancy sweet crackers?
N. W., Virginia.

How to make lady-fingers?
E. M. F., Delaware.

Mrs. J. F. E. O., of Illinois, is very anxious to obtain directions for knitting a Vandyke lace skirt. Can any of our readers send her the pattern? HOUSEWIFE EDITOR.

## Questions Answered

**Layer-Cake Recipes,** for C. M., Ohio—Cream two tablespoonfuls of butter; then add one-and-one-half cupfuls of sugar, and cream again; stir in one cupful of sweet milk, the well-beaten yolks of two eggs and two cupfuls of flour, into which two teaspoonfuls of baking-powder have been sifted, one-half teaspoonful of salt, then fold in the stiffly beaten whites of two eggs. Bake in layers. Care must be taken to combine the ingredients in the order given. I have always been successful with this recipe.
L. E. W., New York.

**Custard or Cream Cake**—Cream together two cupfuls of sugar, half a cupful of butter; add half a cupful of sweet milk, in which half a teaspoonful of soda has been dissolved. Beat the whites of six eggs to a stiff froth and add to the mixture. Have one heaping teaspoonful of cream of tartar stirred thoroughly into three cupfuls of sifted flour and add quickly. Bake in layers in a moderate oven.

**Custard Filling**—Put two cupfuls of sweet milk into a pan; set it on the range in a kettle of boiling water. When the milk comes to a boil, add two tablespoonfuls of corn-starch or flour sifted into half a cupful of sugar; add the yolks of four eggs and a little cold milk. Stir this into the boiling milk and, when cooked thick enough, set aside to cool. Flavor with vanilla or lemon extract. The custard filling should be made before baking cake. MRS. S. L., Ohio.

**Entire-Wheat Bread,** for Mrs. F. E., of Florida—To two cupfuls of scalded milk add one quarter of a cupful of sugar or one third of a cupful of molasses and one level teaspoonful of salt. Cool and when lukewarm add one yeast-cake dissolved in one quarter of a cupful of tepid water, and four-and-two-thirds cupfuls of coarse entire-wheat flour. Beat well, cover and let rise to double its bulk. Again beat and turn into greased bread-pans, leaving pans one-half full; let rise and bake. Entire-wheat bread should not quite double its bulk during the last rising.

**Vanilla Wafers,** for Mrs. B. R. T., Kentucky—Cream together one-third cupful of butter and lard in equal proportions, add one cupful of sugar, one well-beaten egg, one-fourth cupful of milk and two teaspoonfuls of vanilla. To this mixture add two cupfuls of flour, two teaspoonfuls of baking-powder and one-half teaspoonful of salt (all sifted together). Roll thin on a floured board; shape with small round cutter, dipped in flour. Place the wafers close together on a buttered sheet and bake in a moderate oven.
MRS. F. E. B., Maryland.

**To Clean German Silver**—Some time ago one of our readers asked how to clean German silver. Perhaps the following suggestions may prove helpful to her:

Mix two parts Paris whiting and one part liquid ammonia to the consistency of sweet cream. Apply it with a brush and, when dry, polish the silver with a piece of flannellet. This is what a jeweler told me to use. Try it. MRS. E. V. H., Ohio.

**For Mrs. N. E. D., Ohio**—I feel quite sure that if, after baking, you will leave as much batter in your bowl as you take out, you will not have sour buckwheat cakes.
MISS A. E. R., Ohio.

**Lemon-Jelly** for E. M. W.—The following recipe makes a product of just the right consistency. Soak two tablespoonfuls of granulated gelatin in one-half cupful of cold water and dissolve in two-and-one-half cupfuls of boiling water. Strain and add one cupful of sugar and one-half cupful of lemon-juice. Turn into a mold and chill.

**Rhubarb-Jelly** for B. A., of Virginia—Cut the rhubarb in cubes, leaving on the skin, and cook in just enough water to cover. When very soft, let drip through a jelly-bag, but do not squeeze. Take a measure of sugar to a measure of juice, boil twenty minutes, to every quart of this liquid add one teaspoonful of gelatin previously dissolved in a little cold water, stir until the gelatin is thoroughly dissolved, pour in glasses and set away to cool. It is of a delicate color and very delicious in flavor. It makes a very pretty garnish.

**Lemon-Butter,** for Mrs. C. M., Ohio—Put two ounces of butter and one-fourth pound of sugar in a good-sized saucepan. Add the juice of three lemons and the grated rind of one, and let simmer gently until the mixture is well blended. Now add the beaten yolks of two eggs, but do not allow it to boil after the yolks are added, or it will curdle. Stir constantly until it thickens, then add the whites. They should not be beaten too light, or the batter will be flaky. Stir constantly till smooth and yellow. A double boiler is best to cook it in. MRS. M. A., Vermont.

NOTICE—Will Mrs. M. D. W., of New York, send me her full name and address? I would like to communicate with her.
HOUSEWIFE EDITOR.

# A Hero of the Earthquake

[CONTINUED FROM PAGE 16]

shoulders. She seemed bowed down with sorrow and gave no attention to the big man, solicitously watching her.

The boy came close and stood in front of the judge, till he looked up in annoyance.

"Take it away," he motioned toward the strange child, fearing the sight of a baby would affect his wife more intensely.

Ralph instinctively understood, and gladly turned to go, but thought of the grief-stricken mother checked him. He stood there hesitating, till his little tyrant grew impatient.

"Bye-bye, do-do, bye-bye, Aff!" he commanded loudly, drumming with tiny feet against his troubled guardian.

The mother sprang up instantly.

"Baby! Baby!" she screamed.

"My baby! Here!" and snatched him closely to her, sobbing hysterically.

"Where did you get that child?" the judge demanded hoarsely, sternly.

"Out of your house before it fell. You were gone when I came back."

"It is one of God's miracles!" said the judge, reverently, then turned and tenderly drew his wife and restored child to him.

The boy stole softly back to his accustomed place and sat down forlornly, dreading the long night coming. Around him were people telling in detail of losses and sufferings to one another, but Ralph could not tell his; he set his firm little jaw and stared hard at the driveway.

A rough man, sitting near, shoved him. "Wake up, young fellow, you're wanted!"

He arose immediately, and found Judge Ayres standing over him.

"You're the right boy," said the judge, eyeing him with satisfaction. "Now what can I do for you?"

"It's all right. I don't want anything."

"What's your name and what does your father do?"

"Ralph Haven. I haven't any father. There's just been mother and me. She did sewing, and I'm a messenger-boy."

"And is your mother here in this park?"

The boy looked over the ruined city. "She was *there*—" he said hoarsely, "it happened when the first shock came—I waited—I waited—but the soldiers made me go. They carried me out—and the house burned."

"And just after your home burned you came along and rescued Baby?"

"Yes."

The judge looked in the true, brave eyes set deep in the boy's haggard face.

"Come. My wife wants to see you. And now, how did you save him?"

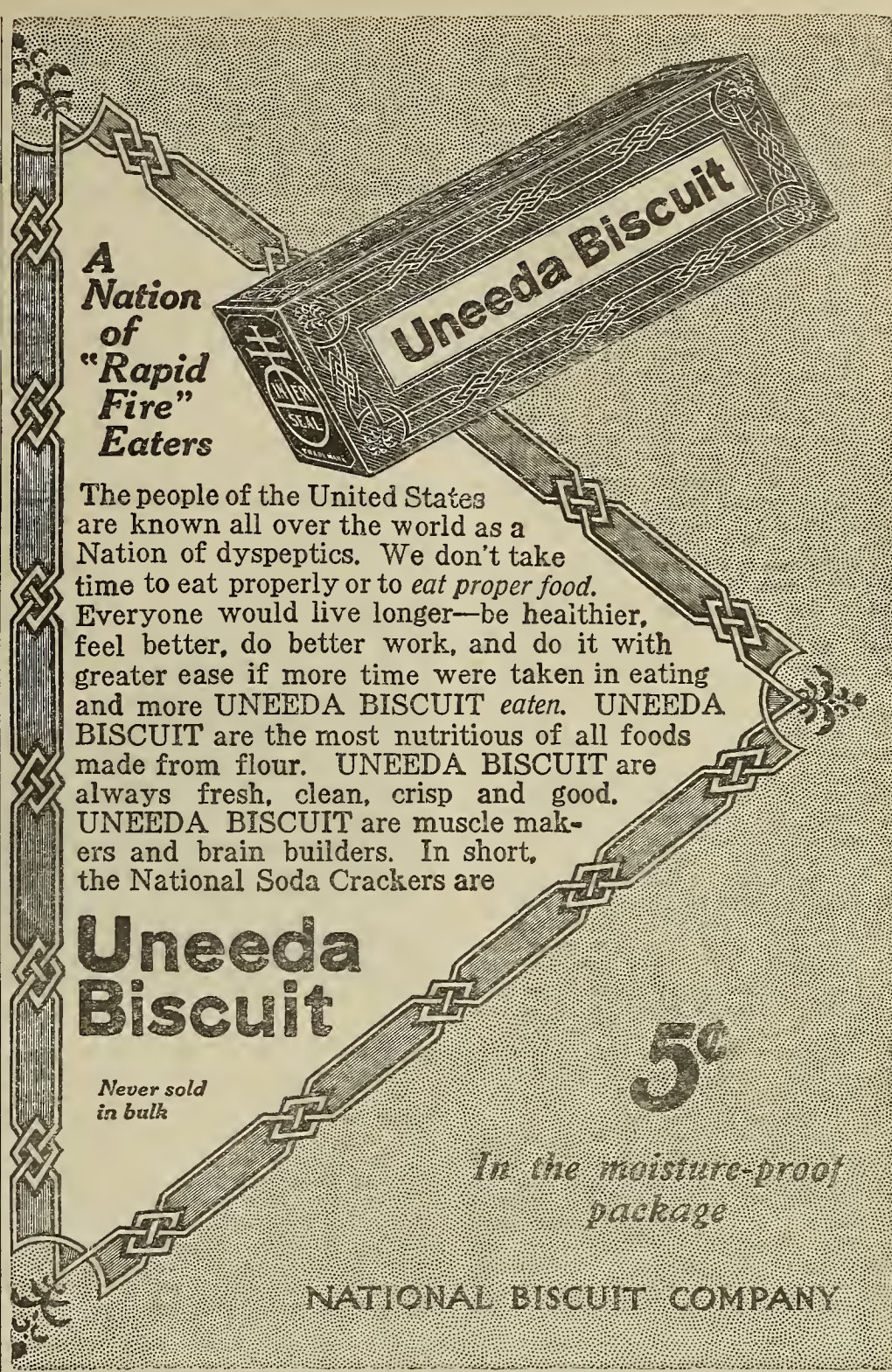
Ralph told, briefly, as they went, and added frankly, "I was 'most sure it was you folks, soon's I heard to-day, but I didn't hurry like I *could*—I kind of wanted to keep Brother longer. I haven't anybody now and it was hard to give him up. I called him 'Brother,'" Ralph added apologetically. "I didn't know his name."

"It's all right," said the judge heartily. "*You are his brother* and, until I can get us all a better one, this is your home," indicating the gray blanket and his family resting on it. "Claire, this is Ralph Haven, the finest, bravest boy in this whole city, and from now on a member of this family. This earthquake has left him alone and motherless."

The boy looked at them shyly, uneasily—all strangers but Brother, who was oblivious, cooing in his mother's arms.

The lady raised beautiful dark eyes, winsome like Brother's, to his wistful ones.

"Come," she said, "we want you. You are Baby's big brave brother, and we are your father and mother." She drew him down close to her, and her warm welcome brought comfort; her kindly hand seemed to soften the terrible, haunting memory of a loved one left alone and dead in a burning dwelling; and here, with Brother's baby fingers clasping him, his face hidden on her silken shoulder, his little overwrought body and soul relaxed, and the first natural, merciful tears, since the awful tragedy, were shed in his kind new mother's arms for the dear lost mother who was gone forever.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Any FARM AND FIRESIDE boy who wants to get this splendid Baseball Outfit can have one without paying a cent of money for it. This Baseball Outfit is one anybody could well be proud of. Every article is standard quality. Once you obtain this Outfit, it will take you no time to organize a Baseball Team, and with this Outfit you can

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Of course the boys will be glad to make you Captain of the Team. They will admire the enterprise and push that enabled you to get this splendid Outfit. Just think you will have all the supplies for a match game the very next day after you receive the Outfit.

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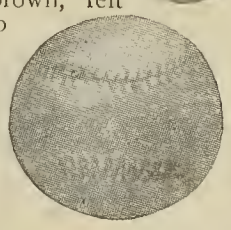

## WRITE TO-DAY!

You should get this Outfit right away, so you can use it all season. Write me to-day and I will tell you how to get this whole Outfit without cost for doing FARM AND FIRESIDE a slight favor.

**Baseball Editor, FARM AND FIRESIDE, Springfield, Ohio**

## You and Your Hired Man

A GREAT many farmers are just now struggling with the hired-man problem. When I say "struggling," I mean it in the strictest sense of the word. It is a task of no mean proportions to find a man who will fill the place he should in the farm economy. Many times we think we have succeeded, when all at once we find that we have made the most serious mistake possible. It may then be too late to change, and what may not a bad man do in the course of a single summer!

Nor is the difficulty all on one side. The men who employ do not themselves always show in very good light when their treatment of the hired man is considered. It is a good deal like matching a span of horses or a yoke of oxen. The two must match or the off horse will want to be on the near side or the other way around. You have seen horses that never would work on the side you placed them. You had to humor them all the time and then perhaps have a fight with them every few days. Men are somewhat that way. It is a job to match them.

Faithfulness is the first thing to be sought in a hired man. The man who is all the time looking for a place to sit down and slip out of the work he knows he ought to do is a trial. The other day a man said of one in his employ, "He is always afraid he will do a little more than his share!" You can imagine what he thought of that kind of a man. Dodging is contemptible anywhere and everywhere.

And then the hired man we like is interested in what he is doing. The man who sees your side of it and is ready to put himself into his work just as if it were his own never will be long out of a job. The best of that is, his job will soon be for himself; for he is the kind of a man who will set up in business, on a place of his own.

The right kind of hired man does every job thoroughly. You have seen men who were all the time on the hustle; that is a good thing as far as it goes, but it can go too far. To do a piece of work well is better than to scamp twice the amount. Every good furrow turned, every cow milked clean, every buckle-tongue tucked under, is a recommendation for a man.

A cheery man is worth looking a good while for. A cotton-planter of the South says he will not hire a picker who does not sing at his task. Such a man will do more work and do it better than one who is all the time "grouting" around, looking for something to find fault about. There are hard things on the farm, of course, and things that go wrong. But the man who can see the bright side of them is a jewel, no matter whether he be boss or hired man.

And then there are the personal habits of the hired man. Some men are a menace to all that is right and good on the farm. Especially where there are boys and girls is this one of the most serious things possible. One season, one month, yes, one week, of association with a bad hired man may be enough to undo all the teachings of a good father and mother for a lifetime.

Say to the man you take on your farm, "I will be true to you, I will pay you promptly, I will do my very best in every way to make your life here happy and prosperous. On your part you must never use an oath, you must not tell foul stories, you must not teach my boys bad habits, you must not drink intoxicating liquors. If you do, we are done with each other!" And say this so that it will be understood, before the bargain is closed. Now, on your part, what?

It is no more than right that the man you hire should have his pay regularly and promptly; that you should use him like a man and not as a beast of burden; that you should not expect unreasonable things of him; that you trust him and expect him always to be on his honor in all he does. Kindness, fairness, integrity—these are the things you are to show toward your hired man. Be as fair to him as you expect him to be to you. That should make an ideal relationship. It will do it. E. L. VINCENT.

## Home-Made Wood-Stain

MAKE a decoction of walnut or butternut shucks and apply (weak or strong solution, according to depth of color desired) to wood, with brush or cloth. Let dry, then sandpaper, fill and finish with wax or varnish. Elm and the harder woods especially are made beautiful in this way. T. V. B.

A Remarkable Hedge of Norway Spruce, Forty Feet High

THE above illustration shows a Norway-spruce hedge which is forty years old and forty feet high. It stands in front of the residence of John K. Hatch, at Greenland, New Hampshire, and attracts much attention. A more effectual wind-break could hardly be devised, and as a screen it could not be improved upon. The hedge is in a remarkably fine condition, the branches growing quite to the ground.

The Norway spruce is particularly to be recommended when a quick-growing, tall hedge or wind-break is desired. It does not live as long as some of the other conifers, however, and has a tendency to become unkempt and ragged at the bottom, after twenty or thirty years. The white spruce will give better service, but does not grow so rapidly. It makes a very handsome hedge, however, and can be grown readily in all of the Northern States. The white pine and the Douglass spruce also make excellent wind-breaks, the latter being particularly good for the Middle States. It grows almost as fast as the Norway spruce. E. I. FARRINGTON.

## Lost Time and What It Costs

TEACHERS used to write in our copy-books, "Procrastination is the thief of time." During any working day there are many hours and half-hours to spare that just fit the little odd jobs, such as fixing the yard gate, putting a latch on the barn door or setting a pane of glass in the dairy-house. Small jobs take time and yet just fit those odd half-hours. "Lost time is never regained," and a neglected tap, strap or rivet may lead to costly loss of time and money.

Some farmers are always behind in their work hecause they waste precious hours hunting mislaid tools, gossiping with the stray idler or agent, or fooling around town. Some farmers will go to town with a load, and dawdle around the blacksmith shop, street corner or grocery for hours at a time, jabbering with anyone they can find to talk to, not a bit of business in the whole harangue, while their chores wait, the weeds grow and the farm suffers. Meanwhile a neighbor will drive into town, sell his load, get his supplies and be at home in time to get in a good half-day's work.

By planning work ahead you can get it all done without hurry or rush. On rainy days, when nothing else seems to push, grind up all the axes, tools, write those letters you intended, settle your accounts and see about repairs. Regret often follows neglect and nothing can sting like the knowledge of neglected duty. CLIFFORD E. DAVIS.

---

The angleworm and the tile-drain are the best soil-ventilators. Both work without wages.

---

A New England correspondent advises us not to drive the head of the nail quite home in shingling. If the nail is driven too far in, he suggests, it prevents the shingle from swelling and shrinking freely. He insists that the roof will last longer if the last stroke of the hammer is withheld.

---

## A Great Barn Convenience

AS LIGHTNING burned my barn five years ago, I was compelled to rebuild. I put in a horse-fork track the whole length of the new barn, and upon the frame at each end I spiked some cheap lumber and built a ladder, also a platform at each end, upon which attention can be given to the carrier.

I also put a manhole in the roof directly above the platform, making it easy of access. If it had never been used again, it paid for itself as a run-way for the carpenters. J. A. MUSSON.

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# FARM AND FIRESIDE

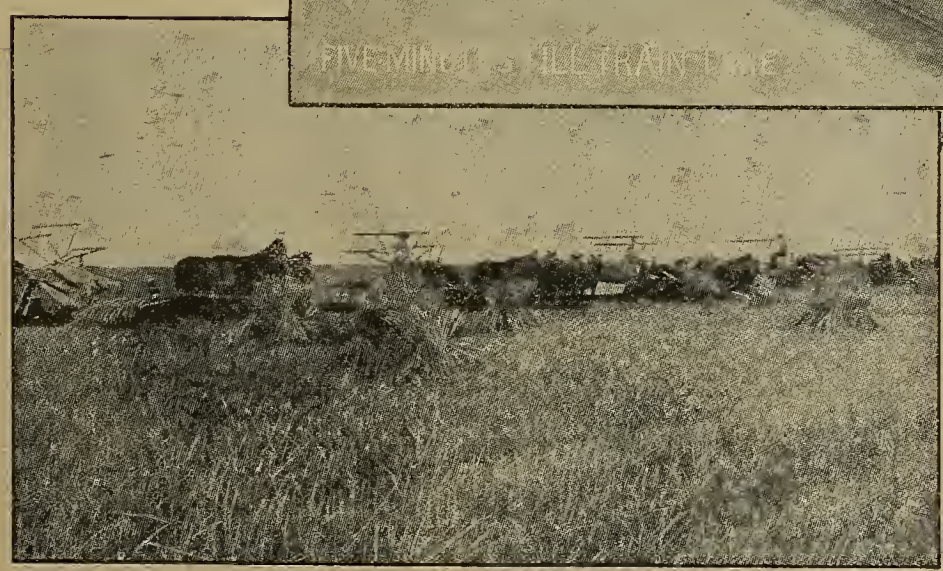
## The National Farm Paper

ESTABLISHED 1877

JUNE 10 1911

Inspecting the Wheat and Land

En Route for the "Last West"



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Canadian Government Agent, 413 Gardner Bldg., Toledo, Ohio, or Room 30 Syracuse Savings Bank Bldg., Syracuse, N. Y.

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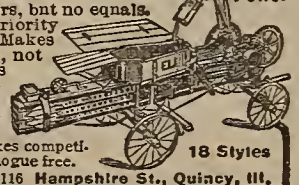

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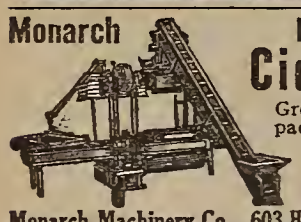

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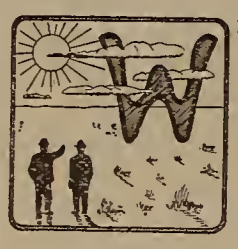
# With the Editor



WHAT would the readers of FARM AND FIRESIDE do with letters coming in from new countries telling of the failure and disappointment of settlers? It is the most puzzling problem I have to meet. I have a letter from a woman, who lives in the dry eastern plains of New Mexico, describing the distress of those who have emigrated to that region, where there is practically no water, in the wake of the publicity given to dry farming. And in the same mail, perhaps, comes a letter from a friend who speaks cheerfully of conditions in the same part of the world, with the forage afforded by the sorghums, the grain from milo and Kafir-corn—and the rest of the story.

I have before me the letter of a reader living in Portland, Oregon, in which he insists that a real injury is being done the people of the nation by the transportation companies and real-estate boomers who are urging emigration to the great Northwest. He says:

> I wish I was capable of putting the matter before you so clearly that you would in turn lend your influence to the enlightening of those people who cannot afford to pay the price of the big and expensive pieces of experience which is coming to those who come to Oregon to get rich quick, or even to get a home for less money than in their eastern states.

This friend insists that the prices of good lands in the far Northwest are higher than in the best of the older states, and that the cheap lands are not cheap enough—while great areas are tied up in the hands of land-hogs and timber-hogs, who are holding it for higher prices.

I have no doubt that he is quite right, and quite honest—I am no green hand in this matter of real-estate booms myself. Real-estate booming is the most depraving business in which decent men ever engage. There are some professions more conventionally criminal in which the ethics are really higher. But the real-estaters are merely the vultures, and they gather only where there is a carcass. The carcass is valuable land. Even in the cactus-lands of the desert of Texas we find a dairyman (Mr. Sinclair) making money by feeding the "prickly pear" to his dairy herd. There are good lands everywhere, and prosperous people. Nobody can be protected against bad judgment in selecting a farm. Every man must be his own judge. There are failures in Iowa and Ohio—plenty of them.

This must be understood, however—farm-land is dearer in the West, all things considered, than in the East and South. But there are miserable, dishonest booms going on in the South, too. There ought to be some way by which emigrants could be protected against such things, and placed on good farms adapted to their respective capitals and experiences. Our esteemed contributor, Mr. E. W. Armistead, of Virginia, seeing this evil, proposes a remedy in the following letter:

> THE writer has been in many states, but he doesn't know of any state that has such an officer as a land expert. What is the need of such an officer? If you ever lived in the South and saw the crowd who come from the North and West every year to buy land here, presuming it is good and cheap, you would see at once the necessity for such an officer.
>
> Take the case of the average man; unless he has been raised on a farm, he cannot distinguish very fertile land from that only half so fertile as in his own state, much less can he form a correct opinion of the quality or value of land in another state or part of the country. So the prospector has no one to look to for advice, except someone interested in the sale of the property. The governor of each state ought to be empowered to appoint a suitable person as land expert. The law should prescribe that he be selected from the farming class, should be a man of unimpeachable integrity, high character and good judgment. He ought to be acquainted with the lands in every part of his state. Now, the cry will be raised, "Another officer to be paid." But not so. The state need not pay him one cent, but should give the officer the right to charge ten dollars per day and expenses for his services.
>
> If the prospector has no friends in the state or locality upon whose judgment he can rely in the matter of buying a farm, he has simply to get the address of the land expert and make a date with him to meet him at a certain point to examine and pass upon the merits of the intended purchase.
>
> A man looking for a farm in a distant state feels very dependent. He knows nothing about the people or the soil, and as a rule is generally at the mercy of the real-estate dealer or landowner.
>
> But when he knows that he can get the services of a good, honest man at a moderate cost to pass judgment upon the tract after he has inspected it, the prospective purchaser has much more confidence in putting his money in the venture.
>
> The writer has known a good many persons who came to this state and bought land under a misapprehension of the facts. As a consequence they were sold out in a few years and returned to their former home penniless. If these people could have had the services of a land expert, they would never have bought the land in the first instance.

Well, as Mr. Dooley says, "I dinnaw!"

LAND expert's job would be a bonanza in some states I know of. But I am harassed by doubts as to whether or not any department could stand up against a gang of millionaire cutthroats who are trying to sell sand-barrens as "wonderfully rich truck-farms capable of being made to yield a profit of five hundred dollars per acre yearly."

I wish I were able to protect all our readers and the public generally against such swindles; but I can't—simply because one can't say that any region is worthless. For there is no such thing as a worthless region. There are regions that are worthless to me—but *you* might make money there. Perhaps the best advice to give is that where prospective emigrants are financially able, and strong enough in numbers, they should hire a qualified expert to look over the exact lands in question. If not, they must judge for themselves.

The moral is, stay in the old neighborhood, if you can get a fair "lay." You know conditions there.

Herbert Quick

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# FARM AND FIRESIDE

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The man who will "bear watching" will bear letting alone.

Good roads cost money; bad roads cost a good deal more.

The dog is the most faithful of friends, but if one keeps too many, they are apt to be his only ones.

## The Restless American Farmer

THE American is a migratory bird. The short series of articles beginning this issue, entitled "Our Home-Seekers' Excursions," is meant for the farmer who expects to migrate, or is interested in the subject. We shall not exploit any section, nor throw cold ink on any. The observations are in the main not ours, but of those who have examined the unsettled country, or actually farmed it in the settled sections.

We think that the matter of emigration is always a serious one, but can be solved only through investigation and thought on the part of those who are inclined to it. Ordinarily, we think a farmer can do better by developing some latent possibility in the region in which he happens to live, no matter where it may be, than to go to new and untried problems.

But we are aware that this has not been the rule in the past, which teaches the general benefits of moving on. We think this instalment and those which will follow will prove of interest to the stay-at-homes, as well as to the rolling stones.

## Hook-Worm Can Be Cured

THAT the South may be completely rid of the hook-worm scourge is made clear by the experience of the island of Porto Rico, where it has been fearfully prevalent. Three hundred thousand cases have been cured, and the towns and more thickly settled regions have been freed of the disease.

It is expected that the work will be pushed into the mountains and back lands, and that the whole island will be cleansed of the trouble within a reasonably short time. No one afflicted with this disease can be as useful or as happy as he might be. The work already done in this country has restored thousands to a life better worth living, and all concerned should take heart and press on to victory.

## Getting Rich in New England

ONE swallow doesn't make a summer—nor four, either. Similarly, four townships in New Hampshire don't prove a case for—or against—all New England. Maine, for instance, has a good deal of pretty large-scale farming. But the study made by the Department of Agriculture of four New Hampshire townships does show a goodly fragment of New England truth. It seems to indicate that less than one third of the farmers of these four townships earn five per cent. on their investment, to say nothing of wages. The average gross income for these farmers from all sources is $337 annually. Many of them are old men, to be sure—and old men cannot earn by manual labor what young men can earn, in any occupation. Some of the old men, too, are doing very well. But the most valuable finding of the investigators is as to the sort of farming that pays. Dairying and general farming on the whole do not pay in New Hampshire, while fruit farming and poultry do. This is as we have at one time or another suggested. Mixed fruit and "chix" would seem the slogan for New England, with specialties where they can be developed. The Greek and Italian farmers seem prosperous in many parts of the New England states. Why can't the department study the profits of these newcomers? It would give us some interesting if not altogether pleasant comparisons.

## How War News Hatches

WHEN you read in the papers that we are about to be plunged into war with some nation across the water, remember that there are interests that thrive on war scares. Every war scare helps the market for things used in war. It is impossible to tell whether the scare is made in their interests, or really rests on some actual fact of foreign relations.

Perhaps the easiest way to settle our minds is to ask whether there is anything wrong between us and the nation in question, really worth fighting about. If there isn't, don't participate in the scare. As between us and Germany and Japan, for instance, there isn't. War news is usually tainted news.

## Nature Provides a Stable

AMONG all the pictures of curiosities which have been sent to us, this of a gigantic old sycamore is perhaps the most wonderful. We are indebted for it to the kindness of Miss Annie L. McLaughlin of South

Branch, West Virginia. It stands on the McLaughlin farm, close to the river, near South Branch, and about eighteen miles from Romney.

It is a boundary tree, and is mentioned as a very large tree in a deed dated 1786. The appearance of the horses' heads emerging from the hollow, and the lady, who looks like a dwarf in comparison, gives the beholder a start equal to that felt on examining a picture of one of the big trees of California.

## Make the Government Ours

IT MAY be said that nothing which the government, state or national, can do can make our farms profitable. But history is full of evidence that it may make them unprofitable. Government of the people for the benefit of the few cannot add to the produce of our labor, but it may take from the profit we retain. It can't make our markets good, but it may so interfere with conditions as to make them bad. We should not forget that the difference between the enslaved muzhik of Russia or peon of Mexico and the free and prosperous farmer of New Zealand, for instance, is almost entirely one of government.

Our institutions are to be greatly changed in the next few years—anyone can see that. The present-day movement to make it more truly popular will succeed or it will fail. If it fails, the reaction will make us less a republic than we have ever been in our most plutocratic and oligarchic days. The fight for the control of the government is like the struggle for the ball in a football game. In every scrimmage the ball goes toward one goal or the other. It seldom stands still.

Farmers belong to the class who have been least influential per thousand of population in all affairs of government, because they are scattered. Twenty men in the caucus hall of a city ward under the old caucus and convention system are more influential than a hundred farmers who come together with no plan.

The direct primary has done great good in restoring power to the people and taking it from the gang. The farmer who is not working in his community for better primary laws is not awake to his own interests. The popular election of United States senators is coming; but the amendment of the constitution is a slow process, and there is much work to be done in that field, also. We cannot expect our interests to receive proper consideration from senators in whose choosing other interests have had a controlling part. Direct legislation in the form in which it has been adopted in Oregon and in some other states—the initiative, the referendum and the recall—will make the government really and truly the people's government. It is coming fast, but it is not coming fast enough. The producing masses should get more actively into the direct legislation fight. Progressive leaders in the country should get into touch with progressive leaders in the towns and should organize for the great task of making the government really ours.

The harvest is the judgment-day of the summer's work.

## Swat Him!

CONSIDER now the little fly, whose name is rhymed with "Baby-bye."

He has his birth in the manure, crawls forth and loiters in the sewer, and, smeared with deadly typhoid germs, he leaves his brother maggot-worms, unfurls his dainty wings of silk and dumps his microbes in the milk, where their huge numbers mount and mount, increasing the bacterial count, until they reach the food supply some woman feeds her "Baby-bye."

The fly comes gaily unto us, his feet all gaumed with poison-pus, and singing clear his song so sweet, alights and cleans them on the meat. He gathers scarlet-fever spores and leaves them on the walls and floors; he is not proud, and oft will stoop to carry heavy loads of croup, and place it where its awful death may come and go with baby's breath. Oh, do not call him indolent! He calls that summer day misspent in which he's failed to load the breeze with the live germs of some disease; and if he finds them not, though hurt, he'll be content with just plain dirt.

Consider well the little fly, who buzzes so 'round "Baby-bye."

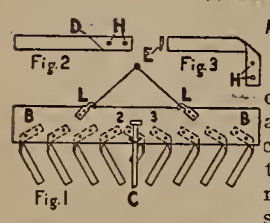
E. W. Matheson, tobacco expert of the United States Department of Agriculture, says that every tobacco-farmer should aim to make one thousand pounds to the acre, and this would require seventy-five pounds of potash. The burning quality depends largely upon the amount of potash taken up by the crop.

Of the tricks of the scamp there is no end. Here is a new one. A certain wealthy Iowa farmer is a justice of the peace. Recently there appeared before him a couple of strangers desiring to be joined in marriage. The justice complied, filling out and signing a certificate of marriage, on a blank furnished by the groom. This turned out to be a promissory note for nine hundred dollars, which the strangers discounted at the local bank and went on their way rejoicing to parts unknown.

# "The Best Tool I Use"

## A Page by Farmers Who Work with the Best Tools and Study the "Know How"

### The "Cyclone" Cultivator and Weeder




THE best tool I use about the farm is what we call here in California a "Cyclone." It is a combination cultivator and weeder, and may be made any desired width. I will describe one knife, as they are all made alike.

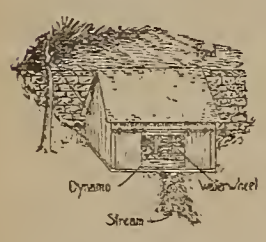
Take a piece of tire-steel three feet long, three inches wide and three eighths of an inch thick, taper one edge of the steel to a cutting edge for twenty-six inches of its length. The end view of the steel is represented by E in the sketch. Bend iron to nearly a right angle at dotted line (D) to form figure 3. This bend should be made rounding over the horn of the anvil, making the diameter of the curve two-and-one-half inches.

H H are square, one-half-inch holes for the heads of carriage-bolts. B B is a two-by-twelve plank of convenient length, on the under side of which the knives are bolted. C represents the lower end of the handle, useful in guiding the tool, and L L are the lugs it is pulled by. Cut twelve inches from the cutting end of one knife and bolt it so that the center of plank is midway between the holes in the knife, bolt knives 2 and 3 so that there is a four-inch clearance between the cutting ends. The other knives are placed twelve inches apart on either side. We generally have ten long knives and one short knife for a ten-foot plank, then several shorter planks for use in the melon-patch and vineyard, taking as many of the knives from the longer board as are required.

If this tool is used before the weeds get too large, it leaves the ground absolutely clean. As it cuts all of the ground it passes over, at a depth of two to three inches, it beats anything for a summer cultivator.

A. J. GIBSON, California.

### A Pond in Harness



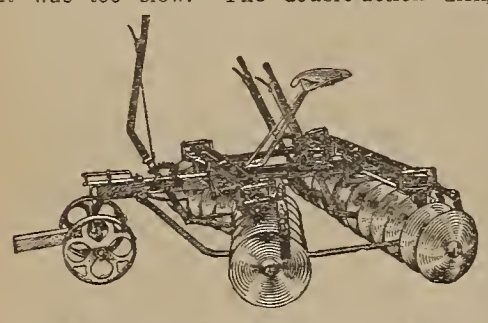

THE very best tool I have on my farm is a pond five by eighteen rods in size and fed by a tile-drainage system and four good springs. This pond was built by damming a deep ravine. I have harnessed the stream with a good water-wheel and small dynamo, which runs the churn, saws wood and lights my entire house and barn, thus saving a great amount of expense and labor.

JOHN M. NEWTON, Ohio.

### The Double-Acting Disk-Harrow

ONE of the latest additions to a general farm equipment is the double-acting disk-harrow. This implement consists of two sections of sixteen-inch disks in front, that throw the dirt out like an ordinary disk-harrow. Back of these are two more sections of disks exactly the same as the front ones, except that they throw the dirt in. The machine is controlled by means of three levers, which enable a man to set either front or rear sections deep while the other goes shallow, or he may run both of them deep or both shallow.

This tool was built to fill a long-felt want in the way of a tillage implement. The old-style single disk ridged the ground terribly, and double disking was not popular, because it was too slow. The double-action disk,



however, combines the speed of the single disking with the efficiency of double disking.

Whenever a new implement comes on the market, it is designed to do a certain kind of work, but if it proves very successful at this particular work, farmers invent new ways of using it. This has been the case with the double-acting disk-harrow. It was designed to double disk as fast with the same horse-power as the old-style disk could single disk. It was not long, however, before farmers here and there found that this harrow was good for uses where other harrows were unsatisfactory.

Here in the West, on both dry farms and irrigated lands, we have learned the value of deep plowing on heavy soil. We have also learned the value of reducing each day's plowing to a good seed-bed condition before any moisture is lost by evaporation or clods have a chance to form.

With the dry farmers, the subsurface packer has been most popular for preparing the seed-bed, but they have to use a spike-tooth harrow to reduce the mulch to its proper fineness. On farms where the double-acting disk-harrow has been added to the equipment, it promises to take the place of the packer, because it packs the ground and leaves a fine mulch, whereas formerly it took two operations to obtain this condition.

The disks are six-and-one-fourth inches apart and the rear disks cut half-way between, getting all the ground that the front ones miss. When used as a packer on freshly plowed ground, all the sections are set straight, the edges of the disks cutting up the soil fine and the back of the disks packing it down.

The double-acting disk-harrow has come to stay, and the single disk will eventually become as out-of-date as a broadcast seeder is now.

IVAR MATTSON, Colorado.

### The Handy Putty-Knife

I UNHESITATINGLY choose the putty-knife as my favorite tool. I am an old retired painter. I always found it the most useful tool in my kit, and I can't get along without it now. I keep it tolerably sharp on the end, just a blunt "double" edge, and also sharpen one edge of the neck.

I can plug or cut a melon with it, peel an apple, slice potatoes or prune a tree.

I can scrape a plow or hoe, or clean a horse's foot. It's a good garden-trowel or asparagus-knife. I magnetized it on a dynamo, and if I were to get lost, I would suspend it by a raveling and locate north.

When I try to be "handy man" around the house, I wouldn't allow the most improved patent can-opener ever made to back it down. I clean pans with it and can easily remove affectionate pastry from any dish. Then, on the reading-table, it's a paper-knife and eraser. It beats a brush to spread paste or mucilage. It's a paper-weight, pencil-sharpener and nail-cleaner. Then it's a measure; the handle is just three inches to the metal piece at the end, which is half an inch wide. I have four lines cut with a file on the blade; it is as reliable as a rule for measuring. These are not one half the uses I find for it, and I find new applications every day.

The ladies may say a hairpin or a hatpin is the only indispensable tool, but I must say that anyone who hasn't learned the utility of the putty-knife is surely to be pitied.

JERRY HUMPHREY, Louisiana.

### Adjustable Hand-Cultivator

SINCE my farming has become limited to the kitchen-garden, the little hand-cultivator, the working part of which is here illustrated, occupies first place among the tools I use. I consider it best because I can get over my garden much quicker with it than any other and do just as good or better work. It is the lightest to handle, no useless weight of wheels and frame to drag around, yet it is strong enough to use in any soil that is fit for vegetables.

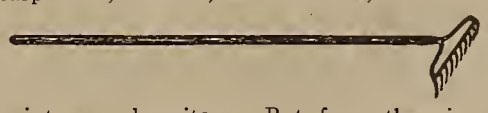
Then you do not spoil part of your work by tramping over the freshly loosened soil. When I get over my garden with this cultivator, the ground is all loose and mellow, no footprints to be seen. From the time the plants appear, this cultivator is almost the only tool I use.

Before getting it the weeds were sure to get ahead of me in some part of the garden, but with it I have the weeds under perfect control and can keep a dust mulch all over during dry spells. This alone nearly doubles the product of my garden, without any increase of time taken to care for it.

H. A. BEATTY, New York.

### Long-Handled Iron Rake

BEING a kind of "jack-of-all-trades," I have use for nearly all the tools common to carpenters, masons, stone-cutters, and even



painters and writers. But from the viewpoint of a farmer who has gardens and walks to take care of, my favorite weapon of offense and defense is the long-handled iron rake.

With this tool I prepare my seed-beds, raking away the stones; then I turn it teeth uppermost and cover and smooth over my seeds. To make my rows, I turn it around and use the handle. When the seeds come up, if the ground is hard, I drag the sharp teeth of my rake between my rows of onions, beets and lettuce, thus breaking the crust, and forming a loose mulch which impedes evaporation. After every rain I go over my garden with my rake in one tenth the time it would take with a hoe. I run the long handle under the thorny blackberry and in other places equally hard to get at, loosening the soil and allowing the sun, air and rain to penetrate the earth.

Briers and bushes, while being burned, can easily be pushed or pulled over the coals with a rake. For scraping moss or loose bark from high trees, the back of an iron rake is very efficient. Indeed, I could better spare any tool on my place than my iron rake, for the more one uses it, the more indispensable it becomes. Long may my iron rake last, for it always comes up to the scratch.

WM. F. HENDERSON.

* * *

An iron rake with the teeth set close together, and a long, wooden handle, is my favorite tool. For starting wood fires, I rake the wood-yard over lightly and get nice chips for fuel. I use my rake for collecting and burning trash and dead leaves.

When I clean out my blackberry and raspberry patches, the rake is fine for raking among them, and a dexterous side movement with the teeth easily breaks off the old dead stalks and canes of last year. I use it for making beds and walks in the garden and for raking up weeds in the summer.

When a hen steals her nest, that long-handled rake reaches way in under buildings and among weeds for the eggs. If I want fruit from the limb of a tree I can't reach, up goes the rake after the limb.

MRS. J. FRANK HODGE, Virginia.

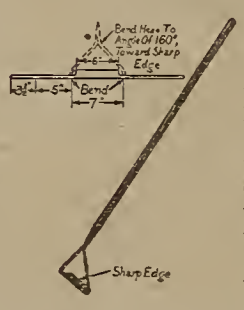
### The Corn-Knife

HERE is my best tool described and illustrated. It is a corn-knife made of good steel with a rather thin blade. The knife was made by my blacksmith, and is the best kind of a knife made for cutting corn by hand. The blade is about fifteen inches long and one-and-three-fourths inches broad and has a curve much slighter than the old-fashioned sickle, yet sufficient to gather the arm full of stalks.

The handle is ten inches long, making it possible to cut low without bending the body; and for drilled corn one can reach ahead and gather in a number of stalks and cut them with one stroke of the knife. The back of knife extends four inches beyond the handle, and the tip of blade extends five-and-one-half inches in front of handle. That makes a nicely balanced knife, and if the steel is good and well tempered, one can cut corn all day with less effort than with any other kind of knife. The shank is run through a handle of wood made to fit and is secured with a threaded nut.

C. L. DOYLE, Ohio.

### The "Scalper"




I LIVE on a general truck-farm in a trucking section, and my favorite tool is one locally known as a "scalper." I feel sure it will in time be generally adopted on truck-farms everywhere, and fill a long-felt want on the farm where general crops are grown. It can be made by any blacksmith at a cost, aside from the handle, not exceeding twenty cents. All that is needed is an ordinary hoe-handle and a small iron rod twenty-four inches long and from one eighth to one fourth of an inch in diameter.

Measure off nine inches on each end of the rod, leaving six inches in the center, which is heated. Then hammer out so as to make a surface at least half an inch wide with a slight bevel, so that one side may be ground or filed to a reasonably sharp edge. Now measure one-half inch on each side of the flattened surface or blade, and from those two points bend the ends so as to form a triangle (see sketch), with the blade as a base. This makes the base seven inches long; six inches being flattened and sharpened, and one-half inch on each side round or partly so.

Now have the two sides of the triangle, for a distance of three-and-one-half inches on each, welded together to make a sharp shank to put in the handle. Stand the triangle up with the sharp edge of the flattened side toward you. At the base of the shank (point where the two sides meet), bend forward so as to form a slight angle, about one hundred and sixty degrees. Insert in an ordinary hoe-handle and you have one of the lightest and most efficient tools in existence for killing weeds and maintaining a good dust mulch.

The dimensions stated are for the size that is used in ordinary work, but for special purposes they can be changed to suit the crop or taste of the user. The scalper is used much like a hoe; the flattened edge is run under the surface of the soil. It breaks any crust that may have formed and also cuts off all weeds at the same time.

A careless or unskilled workman will often do untold damage with a hoe having a sharp edge, while with a scalper the injury will not be nearly so great because of the smooth, round corners that come next to the plant. "The Man with the Hoe" has disappeared and "The Man with the Scalper" has taken his place.

WILLARD B. KILLE, New Jersey.

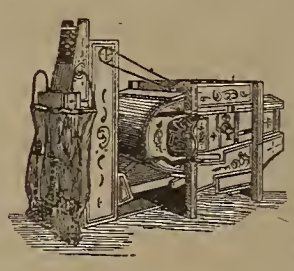
### Home-Made Tile-Spade

EVEN though we are living in the hills, the tool I see the most need of just now is a tile-spade. It is my handiest ditching-tool, and I made it out of an ordinary long-handled round-pointed shovel by clipping off the sides, as shown in the sketch, so it will do to take out the "crumbs" from the bottom of a narrow ditch for four-inch tile. I don't know why the manufacturers don't make such a tool. There may be some long-handled spades on the market, but none equal to the one described.

THEODORE ROMINE, Indiana.

### The Fanning-Mill

I CONSIDER my fanning-mill the most valuable tool I use, for it pays the largest dividend on the investment. The sowing of good, clean seed is the foundation of good farming; and good, clean seed can be had only by the free use of the fanning-mill. The poorest of poor farming is to sow dirty, inferior and foul seed. Why plow deep and cultivate well, if the seed is not good? Then, too, when grain is to be marketed at the elevator, the buyer will cut the price if the kernels are not uniform or if other grains are mixed in.



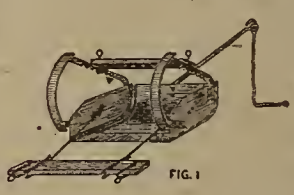
Then my fanning-mill pays for itself every season in the extra price I get for seed grain sold. This tool can be used when other tools are useless. The more I use the fanning-mill, the more I think of it, for I find that a good mill not only takes out the dirt and weed seeds, but grades the seed, thus getting a more even stand of grain, for if seed of different sizes is sown, some places will be thick and others too thin.

I have come to these conclusions after many years of experience, and I would urge every farmer on a grain farm to get a good fanning-mill and not be afraid to use it. The value of the fanning-mill is too great to be estimated in dollars and cents.

S. B. MILLS, North Dakota.

### Scraper for Irrigation Work

A TOOL to level land, to throw up borders and make ditches is the tool that is needed by the farmer who irrigates. In order to be irrigated successfully, the land must be level and divided into bordered sections, and, in order to properly discharge ditch-water onto the level plats, the ditch should be made on top of the ground with raised sides and not dug into the ground as is usually done.




A tool to do this necessary work quickly and requiring but one man with one team to operate it is the scraper here sketched, and undoubtedly all irrigators who are familiar with this tool will join in a loud chorus of approval, and those who do not know of this handy tool will greatly lessen their labor if they investigate.

Figure 1 shows the scraper ready to be filled; the horses fill it just like an ordinary bail scraper. To dump, you simply let go the handle, the scraper tips forward at once and slides on its "feet" as shown in figure 2, dumping the load either in a heap or distributing it evenly, all according to whether the bar across the front is set near the scraper body or near the "feet."

If necessary, in order to level hard ground, the operator rides the top beside the handle, and this weight causes the scraper to cut through bumps that it might otherwise jump.

The rope in the handle is used for convenience in lowering the scraper after dumping the load.

ROMAINE LOWDERMILK, Arizona.

### Headwork Awards April 25th

**Jesse Rahn, - - - - Roping the Fodder**
**C. B. King, - Can Drink But Not Wallow**
**Mrs. W. D. Bond, Water for the Wash-Room**

# Our Homeseekers' Excursions

## I.—A Trip to the Peace River Country of Canada—By Gardner Hazen

On Peace River

CANADA is the world's greatest surprise-box. It keeps opening out, and opening out, until one wonders when it will cease to expand. Middle-aged people remember when Canada ceased at Lake Huron. About 1880 the great plains of Manitoba came into the world's view and admonished us that good agricultural lands in the West were not confined to our own West.

From that time Our Lady of the Snows has marched on from region to region in a way truly American, until now she has her own East, her own middle districts, her own West and her own "Coast," a great deal like ours. And north of the settled portions of her "West"—which includes the provinces of Saskatchewan and Alberta—lies what in its turn calls itself "the Last West," the wonderful Peace River country, to which the writer went in the summer of 1910 with a party of excursionists, to see for FARM AND FIRESIDE readers what the new land, soon to be opened by railways, is really like.

Practically the only fertile frontier left open for homesteads is here in the far northern part of the Province of Alberta. Here is the last free land that remains for settlement by the Anglo-Saxon. This region is known as the "Peace River Country," and comprises an area of from forty to forty-five million acres (a territory as large as most any four states of the Union) of timber and prairie land.

### The Fertility of the "Grande Prairie"

One section of prairie called the "Grande Prairie" is about eighty miles square. The fertility of this soil may be taken as typical of the whole country, although in the timbered section the organic matter extends to a greater depth. The soil is a black silt loam on silt or

Wheat-Field in the Peace River Country

gray clay subsoil at a depth of forty inches. The surface soil averages eight to ten inches. Twenty million acres of rolling prairie like this are waiting for the steam-plow and settlers. Last year 110,000 Americans left their country and came to Canada, not because they couldn't make a living at home, but because they realized what a wheat country this is to become. Many of these found their way into the Peace River prairies, where for centuries the wild pea-vine and other vetches have been storing up nitrogen in the soil which now yields phenomenal crops.

The Dominion government two years ago, in order to demonstrate the importance of opening up this Peace River country, established at Fort Vermillion (latitude 58° and 30′ N.) an experimental station under the charge of a Mr. Robert Jones, who for twelve successive years had grown wheat upon his farm without using fertilizer of any kind. His crop last year, although slightly damaged by frost, gave him twenty-eight-and-one-half bushels an acre. The soil here is a black loam silt extending to a depth of more than forty inches.

To prove the possibilities of agriculture at this latitude, the government has planted all kinds of garden vegetables, which grow to a size and quality that would make most of those found in our largest and best produce markets look puny and poor in comparison. Cabbage, cauliflower, beets, onions and carrots all thrive. Last year he dug 394 bushels of potatoes on every acre where they were planted.

Although Ladoga wheat is the common variety grown by the settlers, Mr. Jones has seven other varieties which seem to do equally as well, all having large, full heads which stand in some places five feet four inches from the ground.

### Rainfall Averages Fourteen Inches

The rainfall is not as great as in the more southern localities. It amounts on an average to about fourteen inches, never falling below nine inches nor getting above seventeen.

This seems to indicate that the most profitable method to employ would be that of semi-dry farming. In fact, it has been found by experience that summer fallowing once in three years gives a greater yield of oats by ten to fifteen bushels.

The hours of sunlight which cause the crops to mature as readily as they do are very long. On June 21, 1910, the sun was shining for eighteen hours and twenty-six

Experiment Station Plots in Peace River Country

minutes as recorded by the government's instruments. But, in spite of these long hours of sunlight, the season is not quite long enough to grow Indian corn, as August frosts come early. Serious damage is done to wheat about three years out of ten.

These early frosts, however, have been experienced in all the southern parts of the Dominion and even in the Dakotas, until large areas of the soil were under cultivation. The deepening of the loose earth seems to allow it to become warmed to a greater extent, and probably tends to keep the air of the whole region above the freezing-point.

Alfalfa and red clover at present do not stand the winters, which sometimes are very severe. The thermometer often drops to forty and fifty degrees below zero. Peas and beans grow quite readily, and, as they are naturally well inoculated with root tubercles, the problem of restoring nitrogen to the soil can be solved without the aid of alfalfa or clover.

At present there are two big drawbacks to the country. The chief one is the lack of transportation facilities. As everything has to be brought in several hundred miles by wagon and then twice as many more on steam-

Vegetables Grown in Latitude 58° 30′ North

boats, the price of the necessities of life are doubled by the time they reach the consumer, but those articles which are produced in that country, such as butter, eggs, beef and lumber, can be had at a very reasonable price.

### The "Trust" of the Great Northwest

The other factor in retarding the development of the Peace River country is the Hudson Bay Company. This is strictly a trading company and demands that all their debts must be taken in trade. This may be satisfactory to an Indian, but not so with a white man. On the Athabaska River, "The Company," as it is called, owns a deposit of salt of fine quality which might make the price of salt very low in this neighborhood; but it is not so. To prevent the settler from salting his own meat, "The Company" charges twelve-and-one-half cents per pound for salt.

At Vermillion "The Company" operates a grist-mill; yet they will grind only fifty bushels for each man at thirty-five cents a bushel, and he must first sign a contract to the effect that he will in no manner trade with the Indians for fur or supplies.

Consequently the settlers have left on their hands large amounts of grain, which they feed to their stock while obliged to pay $6.50 to "The Company" for a hundred-pound bag of flour. If anyone should trade with the Indians, in retaliation, "The Company" would refuse to sell them anything at all, and it would be left for the trader to get out of the country or starve.

### The Experiences of Mr. Lawrence

This is just the situation in which Mr. Sheridan Lawrence found himself. Mr. Lawrence, however, is made of real pioneer backbone and fiber, so was eager for a fight no matter what the odds. With his father and brother he agreed to put all his and their money into a full equipment for a self-supporting community. Therefore, on January 10, 1908, he left Athabaska Landing with a sled train and his outfit, which consisted of a seventeen-horsepower engine, a threshing-machine, binder, mower, hay-rake, plows, harrows, wagons, harness, a small sawmill, a grist-mill and various sundries.

After an overland journey of about three hundred miles, with the thermometer at fifty-five degrees below zero for several weeks and without sufficient food, he reached the Peace River, where he built a large raft, and in the early part of May floated his equipment down stream for two hundred and ninety-two miles to the

Peace River Oats and Beans

place where his farm is located near Fort Vermillion. He now stores his wheat and oats, has ninety hogs in pasture, milks eighteen cows, raises horses on a large scale and in a few years, when the railroad reaches him, he will be a wealthy man since with the railroad will come a market for his products and an end of "The Company's" grip on the country.

### Prospects for Railroads and General Settlement

Therefore, the only important drawback to the country is the lack of transportation facilities, and they are soon to disappear, as three railroads have already made their preliminary surveys.

As fast as the government can survey the country into townships and sections, it is being opened up for homesteads of one hundred and sixty acres. The only way to get land is to homestead upon it, by breaking a certain amount of land and living upon it for six months out of each year for three years, at the end of which time the settler gets a patent or title to his farm. There are practically no farms for sale, and by this homestead process all kinds of land speculation and fraud are avoided, thus saving the country for the small farmer, who shall soon see his wheat and other grains quoted in the exchanges of New York and London.

The Peace River country will be a land of homes, and those who choose to lead the life of a pioneer for a few years will be amply rewarded when the frontier is pushed still farther north and the Peace River country becomes a part of the commercial world.

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# Garden and Orchard

## The Pear-Orchard

PEAR-GROWING from a commercial standpoint is something that, with comparatively few exceptions in certain parts of the country, does not seem to have been as seriously considered as the growing of other fruits, such as apples and peaches. On nearly every homestead will be found some pear-trees, but they are usually grown only for home use or the local market. It is true that the natural conditions are not so universally favorable as for the other fruits mentioned, but there are many localities in the best pear-growing sections of the country, where comparatively little of this luscious fruit is grown. Pear-growing could undoubtedly be made a very profitable industry if given the same attention as the growing of other kinds of fruits.

### Grows Best in Cool Climate

The pear does best in a cool climate, and for this reason we do not find it adapted to the extreme southern part of our country. The best pear-growing sections are the New England States and New York, the country adjacent to the Great Lakes, and the Pacific

Shaded Portions Show Principal Pear States

Slope. Good fruit is also produced in the Eastern States, particularly eastern Pennsylvania, Delaware and the eastern shore of Maryland, but south of the latitude of Washington, D. C., we find that the varieties commence to diminish in size, and the production of the best fruit is not possible. They do not do well in the Middle West, it having been found that they are particularly susceptible to blight *(Bacillus amylovorus)* in that section.

The kind of soil best suited to the growing of pear-trees is a clay soil. If the surface is a rich clay loam, it is desirable to have a good, hard subsoil, even one which will require underdrainage. While a good supply of moisture for growing trees is needed, the soil should not be wet. The principal reason why a light, sandy soil is not suited to their growth is that in a soil of this type the trees make a too rapid growth, and the soft wood resulting from such a growth is more susceptible to attacks of the blight. For the same reason the application of stable manure or nitrogenous fertilizers should be made with care. It is, of course, desirable to keep the trees in a thrifty, growing condition, but at the same time get a slow wood-growth, which will give wood of a hard, firm quality. This is probably more desirable with the pear than any other fruit-tree.

The orchard should be given clean cultivation throughout the growing season, up to the first of August. If the cultivation is stopped at this time, the new wood will become firm before freezing weather sets in, and the loss of twigs from winter-killing will be reduced to a minimum. The cultivation should be frequent enough to keep down weed-growth and maintain a loose mulch on the surface. Sometimes hoed crops are planted between the rows, but the best practice is not to plant them. If they are grown, the management should be such as not to allow them to interfere with the cultivation of the orchard, or to rob the trees of adequate nourishment.

### Slope and Cover Crops

The orchard should be located on a slope, preferably to the northwest, to insure sufficient air drainage, and if the slope is very abrupt, the trees should only be planted along the main body of the hill. If it is desired to cover the whole slope with trees of some kind, cherries may be grown at the top and plums at the bottom of the hill. The orchard should never be sown to grass, but a cover crop is desirable in the winter, to prevent washing and leaching. Unless it is desirable to add nitrogen to the soil, do not use a leguminous cover crop. Rye makes a good cover crop for the pear-orchard, and when it is necessary to add nitrogen for the best growth of the trees, crimson clover may be substituted.

The trees should be set about twenty feet each way for the standard varieties and fifteen feet for the dwarfs. This gives room for a sufficient spread of top, and a good rule for the height of tree is to have it about the same as the distance apart that the trees are set in the row.

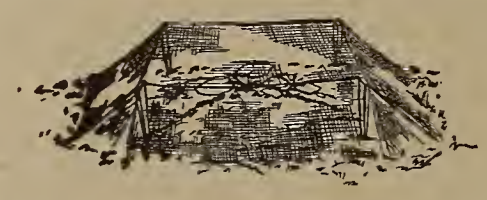
A pear-tree requires little pruning beyond what is necessary to keep it sufficiently low-headed. To do this, the trees, especially the dwarfs, must be rather severely cut back, it often being necessary to remove in the winter fully half of the previous year's growth. This cutting back gives a sturdy, compact tree. It is not desirable to have a pear-tree nearly so open as an apple, as the pear is very susceptible to sun-scald. For this reason the branches are allowed to come out close to the ground, and little pruning is done in the main body of the tree, except to remove such branches as cross and rub.

E. P. WALLS.

## Be Ready for the Squash-Bugs

SOON will come squash-bug time. Be ready; the bugs are. They get musk and water melons both, and they're not dainty feeders. If you plant your melon-seed in hills, get several yards of mosquito-netting, of any color and any grade. Cut it into squares at least twenty-four inches on a side. Put one square over each hill. Spread it over short, light stakes (shingles split up make good stakes), and put dirt around edges to keep everything out and away.

It's easier to keep the bugs out than drive them out when they're once in. Let the



stakes stick up about four inches. This leaves enough space for plenty of air and some growth of vines. The life of these covers is not one season, but several. We have the same ones that were used three seasons ago, and we will use them again this summer.

But they have to be put away as soon as the vines get past the tender stage, since these screens rot quickly if wet much and kept on the ground very long.

R. E. ROGERS.

## To Control Ants and Aphis

A SUBSCRIBER in southeastern Wyoming has raspberry-bushes overrun with ants, and vegetables, cabbage, cauliflower, turnips and tomatoes injured by plant-lice (aphis) every year. The ants and aphis make a strong team for injuring the garden and farm. The plant-lice are really dairy animals for the ants. They suck the juices of the plants on which they are placed by the ants. The ants also furnish protection and "first aid" to the young of the aphis, hatching their eggs in their burrows, and when they have reached the milking stage, the ants place them on just the right plant to afford the best possible results in honey-dew exuded by the aphis, on which the ants feed.

To exterminate the aphis, which are the real enemies to the crops, the ants must be overcome—no easy task. Where the infestation is wide-spread, their nests and runways should be broken up with the plow just as severe freezing weather is coming on and again in the spring, when the ants' and aphis' young are in a tender state. Where the ants' nests are few, the bisulphid treatment will win. Make a hole deep into the nest, pour in two tablespoonfuls of carbon bisulphid and close the entrance. A short rotation of crops is the surest safeguard against this insect combination.

B. F. W. T.

## Cotton-Seed Meal for Potatoes

I NOTE that T. Greiner says that he has not had experience with cotton-seed meal as fertilizer for potatoes. However, he gives good reasons why it would not prove profitable. A number of years ago I mixed acid phosphate and cotton-seed meal for a small plot of potatoes and used plain acid phosphate on another plot by it. I could not see any advantage from use of the cotton-seed meal. I think the reason was that the cotton-seed meal was not so available as it should be for potatoes.

For a number of years I have used poultry-manure in the potato-hills to advantage. The poultry-manure does better for me than any fertilizer I have ever used for potatoes.

This year I am mixing acid phosphate with the poultry-droppings, in order to balance it better and to save ammonia.

A. J. LEGG.

## Be Your Own Middleman

THERE are many farmers in New England who will tell you that farming does not pay, that they do a lot of hard work for a small amount of money. The reason for this is that they sell their produce to merchants and dealers, who make most all the profit. In many cases the merchants pay the farmers in "store pay," thus making two profits. Some fifteen years ago I raised about twelve bushels of small pea beans and three bushels of medium. The small peas I sold to the merchant for two dollars per bushel store pay, but for the medium peas he would not pay more than one dollar and fifty cents per bushel.

I refused to sell and peddled them out to the people, getting two dollars and sixty cents per bushel for them. I retailed the beans for ten cents a quart or three quarts for a quarter. I sold him some nice pop-corn for three cents per pound, and he retailed it at five cents. Peddling those beans out to the people opened my eyes! I made up my mind that in the future I would get the retail price for everything I had to sell, and for fourteen years I have done so.

I commenced raising "garden truck" in a small way and by having my stuff in good condition when delivered and keeping my word with my customers I have built up quite a trade, which brings me a comfortable living. I sell almost entirely by taking orders, so that my loads of vegetables are often sold before they are gathered.

By making my customers' interests my interests, I sell all I can raise at the highest market price. As I cannot raise enough to supply the demand, I buy a lot of fruit and vegetables each year, and this helps the people near me to dispose of their surplus produce. I think it would pay farmers in many localities to club together and hire some suitable person to peddle their produce in near-by villages, for it has certainly paid me to dispose of my produce in this way.

M. L. PIPER.

## Why Some Tomatoes "Run Out"

THE query is often asked, "Why do tomatoes 'run out?'" The answer is, "For the same reason that any other fruit or vegetable will 'run out'—want of care in seed-selection." In the early years of tomato culture we had all sizes and shapes, but a change has slowly been made in both these qualities.

When the Livingstons began, some forty years ago, to improve the tomato, we wondered on what basis or groundwork they proceeded. We knew of no way of crossing the bloom, although all bloom was bi-sexual. We knew that you could plant yellow, red and purple kinds in the same field with little fear of any crossing.

We saved seed from the earliest and best-formed specimens, and had fair success in keeping up a standard, but occasionally we could find deterioration in some plants and their fruit. No attempts were made to cross, for we did not know how to go about it, yet we felt sure there must be some secret of the sexes, locked up in the tomato-bloom.

Some years ago an old tomato-grower said, in conversation, "Never save your tomato-seed from a tomato having a round scar where the bloom has dropped off—always save seed from one having an oblong scar." That was a new idea to us. On examination we found those with a round scar, while on others the scar was oblong, sometimes an inch. He said, "The seed of the round-scarred tomato always runs down, while the oblong-scarred tomatoes have seed that will show improvement where any will be found at all." We do not know whether this is the secret of the sexes in the tomato-plant, but we do know that great improvement can be made in yield and appearance by following the old man's advice.

J. H. HAYNES.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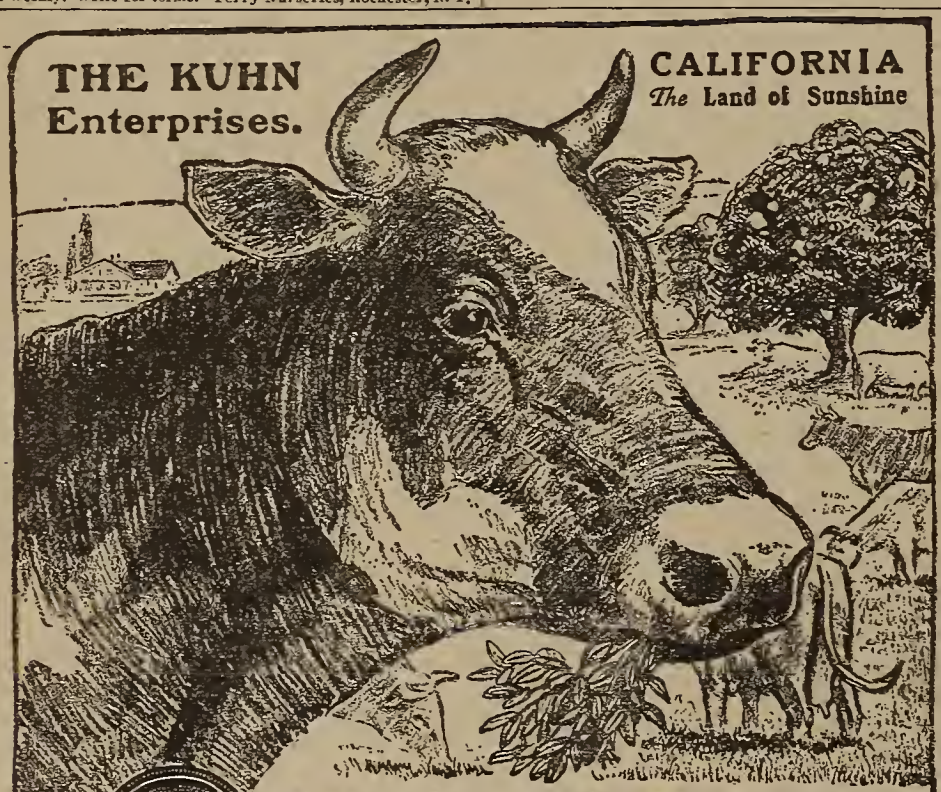

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# GARDENING
By T. Greiner

## Gardening Not Drudge-Work

Many farmers still complain that on a big farm there is no time to make the garden pay. It is true, the family garden may not bring money returns, but it still saves money in various directions. Yet the amount saved, no matter how large, is of small consideration compared with other blessings, the home comfort, home conveniences and the chances of interesting, attracting and educating the younger members of the family. Who wants to miss these blessings and enjoyments? Looked at in this way, garden-work ceases to be a drudge.

## Soot Too Good to Waste

I am asked about the value of soot as a fertilizer. Coal-soot is supposed to contain a small percentage of sulphate of ammonia, wood-soot a small percentage of potash, lime, soda and various organic and inorganic acids. In short, there is some fertilizing value in both, but how much it is not easy to determine as to dollars and cents. There is no reason for wasting any such materials, however.

Wood-soot is often used on flowering plants, especially roses, and is said to invigorate the plants and darken the foliage. To what extent this is due to the ammonia it contains, or to the action of the carbon of which soot is most largely composed, I do not know. I usually scatter all the soot I can get over my garden patches, or on the manure heap, and in this way try to get the benefit of what good there is in this material. Being in a very finely divided state (dust foam), it undoubtedly has also some insecticidal value.

## Long Season of String-Beans

I am not so fond of string-beans as I am of green peas. Yet I know they come handy for the family and are acceptable occasionally for many weeks each summer. The way to have them right along is to plant some as soon as danger of late freezing is over, and plant a few more every other or every third week. Some persons like the green-podded beans, and these are usually planted first, as they are considered hardier than the wax sort.

Whatever kind you plant, however, it is necessary to keep the pods picked off clean if the plant is wanted in bearing for a month or so. If pods are allowed to ripen, the plant will soon give out and cease setting others. The anthracnose or pod-spot is the enemy most to be dreaded. If you plant clean seed, beans taken from healthy pods, your vines will be free from the spot. We always look sharp to this when gathering beans for seed. We let some of the plants mature, and gather the ripe pods for seed. It is a necessary precaution for another year, and a full supply of seed-beans is soon gathered.

## The Time for Planting Celery

A North-Carolina reader asks about celery. He surmises that the statement of profits in celery-growing, as given in issue of April 25th, was somewhat exaggerated. It is easy to exaggerate in making such statements, especially when we have the possibilities of the crop in view. The profits are what we make them, and under favorable conditions we can make them large. Bad management or accidents may make them disappear altogether.

In the South a favorite method of growing celery is that of planting closely in beds, the whole bed being afterward filled up with soil taken from the six-foot alleys between the six-foot beds. I would prefer our ordinary method of planting in rows (single or double), with two to five feet space between the rows, and blanching with earth or boards, even if I lived further south.

We plant early and late, for we want celery on the table from July or August until nearly spring. The earliest is usually blanched between boards, the later by earth banking. In North Carolina you will probably have to plant much later than we do here in western New York. Try celery on a small scale at first. Buy good plants. It is not so easy for the novice to raise them.

You can secure a bulletin treating on celery from the United States Department of Agriculture, Washington, D. C. Ask for a copy of it.

## New Soil Avoids "Damping Off"

A Massachusetts reader tells of having lost whole boxes of young plants, especially tomatoes, by "damping off," and wants information on the subject. The use of sterilized soil is now recommended for the prevention of injury from the damping-off fungus. Exposure to heat, as, for instance, by means of steam-pipes laid a foot or two apart in a box filled with the soil, or soaking the soil some weeks before it is to be planted with diluted formalin, will kill the fungus-spores in the soil and make it safe for the purpose of growing seedlings. It is a good deal of trouble in either case, however. I avoid it by using fresh soil from the garden every year, taking it from a spot where manures have been freely applied in previous years, without making other additions to this soil, except perhaps a little sharp river-sand, or sifted coal-ashes, and possibly a sprinkling of lime. The latter is good in most cases.

I also secure some sandy muck from a near-by farm. This I sift and put on top of the seedling-flats and beds so as to have the finer seeds imbedded in this loose soil which offers little resistance even to the puniest seedling when breaking through to the surface. Don't try to make your hotbed and hothouse soils too rich by the use of too much decayed manure, but a little leaf-mold mixed in will do no harm. Avoid sudden and violent changes of temperature. Avoid over-watering, as well as the other extreme. If you follow these directions, I think there will be but little loss from "damping off."

## Care of the Strawberry-Patch After Fruiting

I plant my strawberry-patch every year, since I find it much easier to set and cultivate a new patch than to renew the old one, owing to the fact that the weeds take such full possession and the ground gets trod so firm between the rows by the time the berries are all gathered.

After the patch has fruited, I mow it off, let it dry, burn it over and let it grow like a wild strawberry-patch. It soon covers the ground, and I have a good half-crop the second year with no labor but to gather them. Then I plow it up and plant to late cabbage.

Another thing I learned by experience. Never leave fresh-plowed or cultivated ground over winter above the strawberry-patch on a slope or hillside, as the rains will wash great quantities of soil down on the patch and bury the plants past resurrection. Either have land above in sod or plant to cover crop. Of course, it is seldom wise under any condition to leave bare cultivated lands in the winter.

The renewing of old plantations is, of course, a matter of opinion. I first tried plowing all but narrow strips of rows with a turning-plow, harrowing the center and working the rows with a hoe, thinning them still more. Then I tried working up the paths, letting a good lot of runners fill them and

The Bank-Account Feeling Has Been Overcome

late in summer plow out the old rows, letting the rows and paths exchange places. A new piece of ground, however, seems most satisfactory and generally produces the best berries.

How often does the farmer sit down to a meal of bread, butter, bacon and cabbage, and dream of the attractive table of his brother in the city with its strawberry shortcake and rich cream? The farmer and his family long for the so-called city luxuries, little appreciating that these luxuries are right at hand, waiting only to be developed. The reason for this is the feeling of the average farmer that it is a waste of time to fool with anything that merely contributes to the enjoyment of living and adds nothing to the bank-account. This spirit of many farmers is a heritage of the days when farming was a mere struggle for existence. The bank-account feeling, however, has gradually been overcome, as strawberries are really a profitable crop, and the farmer who is wise will take as a first step in the right direction the planting of a good, big bed of strawberries.

The work of picking is more than counterbalanced by the pleasure of seeing attractive boxes and crates ready for market, or perhaps a goody number of glass jars of preserved strawberries to be opened during the fall and winter months. Jas. D. Bowman.

The advertising columns of Farm and Fireside are like a big market-place where the dealers drive up with their load of goods to sell. You look them all over carefully and buy what you want. Many of the advertisers have their goods for sale right in your nearest stores. All you need to do is simply call for the goods by name and your dealer will supply you. Advertised goods are generally better than those which are not advertised, for the manufacturers who advertise guarantee their goods to be reliable—thus you are taking no risk in buying them. Not only that, but we guarantee the reliability of all advertisements in Farm and Fireside.

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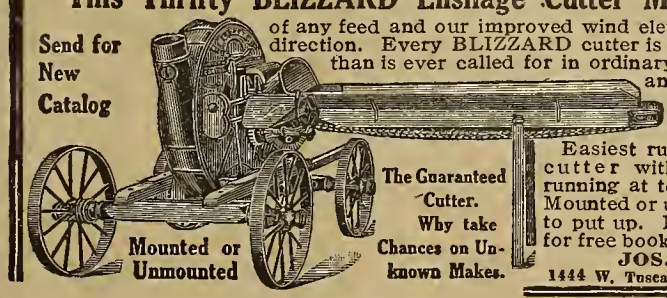

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# Poultry-Raising

## Easy-to-Clean Coop

Here is a handy chicken-coop. The illustration at the left shows the coop complete; the part to the right shows the bottom after the coop is lifted off. The bottom, which is entirely separate, is two inches wider than the top.

This style of coop is easily cleaned, as it can be lifted off the bottom. It also makes it a very easy matter to gather and save the manure. The wire screen slide in front

opens to let the chicks out. The coop measures two by three feet and is eighteen inches high in front and twelve inches in back.

Mrs. S. F. Reinhart.

## Cutaway Roost

To prevent fowls from crowding on the roost, make your perches of boards eight inches wide and about two inches thick. Cut out a V-shaped notch every six inches, making the cut four inches wide, thus giving each fowl ten inches of space.

Set the board on edge as shown in the diagram. Make as many of these perches as necessary. They can easily be spiked to the wall by nailing through the last V-shaped notch. If possible, figure the notches so that

they will come near the end of the board, thus keeping fowls from roosting close to the wall.

This plan of roosts not only prevents the spread of vermin, but gives the fowls better ventilation than when they are crowded together. Another thing: it is very easy to count your fowls when they go to roost.

J. W. Foster.

Build the new poultry-house high enough so that you can stand up straight in any part of it. Houses with low roofs are very unhandy to clean, and it is disagreeable to work in them with the occasional bumps against the ceiling in moments of absent-mindedness. Such houses are apt to be neglected, to the detriment of the fowls.

## How to Fight the Red Mite

An ounce of prevention is worth several pounds of cure, especially when it comes to the fighting of red mites. Put just a little "know how" into the business, and you not only will not make an end to one of the worst pests in the poultry business, but you will do it so easily that you will hardly realize that you have done it at all. It was one of the luckiest finds I ever made when I discovered the following treatment:

It all came about as an accident. I wanted to preserve the poultry-droppings several months, in order to use them most effectively on some quick-growing crops, so I took the advice of our experiment station and composted them with pulverized phosphoric rock, which goes by the trade-name of floats. I used it on all the dropping-boards, and when summer came, sprinkled them into the roosting-coops to make the cleaning easier.

In former years I had had to clean out and spray thoroughly with kerosene emulsion about once a week, in order to keep my roosting-coops habitable, and that right on top of all the other summer work is quite an item. The year that I first used the floats I kept a sharp lookout for the mites, but they failed to appear. At first I thought they were just a bit late in coming, so I kept on cleaning out the coops every week for a while. Then I got to letting it go two weeks, and as the season wore on, with the mites still absent, I let the droppings accumulate for a month, although I took care meanwhile to keep plenty of floats sprinkled into them all. Since then I have had very little occasion to pay any attention to mites as a factor in the management of the poultry business.

The reasons back of this experience I finally discovered to be these: Mites cannot hatch their eggs, except with the assistance of some heat. The two places where they are most apt to find it are under a setting-hen and in among the accumulations of droppings. It is animal heat in the first place and chemical in the second, but it does the business either way. Now, when you sprinkle floats over the droppings with rea-

Sprinkling the Floats

sonable frequency, there is some sort of a chemical union that does away with the heating process. Consequently, the mite-eggs just fail to hatch, or else hatch so slowly that their numbers are not formidable.

All parasites that multiply rapidly are short-lived, so when you interfere with the reproductive process, the adult generation is soon gone. Therefore, I have found it good policy to apply the prevention and let the cure look out for itself. Incidentally, the use of floats helps fix the nitrogen, and so makes the droppings worth just that much more as plant-food. The poultryman who does not use floats under all places where his birds go to roost is wasting either labor or opportunity.

C. M. Gallup.

## Quack versus Cackle

The champions of ducks, especially those bred for egg-production, are making strong claims for the profit-making ability of their birds when kept for egg-production alone on the same basis as hens. In view of this it is most opportune to get the following discussion of this point from such a poultry authority as Mr. W. G. Krum, active superintendent of the experimental poultry-yards of the Cornell College of Agriculture. His statements concerning the comparative ease of growing and maintaining ducks and hens introduce some live, authoritative testimony into the controversy.

The food factor cannot be dodged in weighing their relative merits, but good business judgment in providing economic feeding rations can do much to modify the cost, and we are inclined to expect the Indian Runner will be able to come back with a triumphant quack when given just the range and well-adapted, inexpensive requirements. At all events the champions of ducks and hens can try out this problem on a strictly accurate basis. This is just the analysis of the question we want to encourage. Mr. Krum writes as follows:

There seems to be an impression among amateur poultrymen that ducks are profitable as egg-producers. This is greatly exaggerated by some breeders of egg-producing varieties. What we mean by profit is the price received for the finished product above the cost of production.

### Cost of Production

The amount of food consumed by a duck as compared with a hen is usually about three times as great. The cost of this can be lessened materially by feeding plenty of green food or giving a green range, as a duck will consume nearly half a pound of green food daily. If a hen, laying annually one hundred and fifty eggs valued at $3.50, consumed food costing $1.25, this would leave a profit of $2.25, while if a duck produced one hundred eggs valued at $2.75, at a time of year when eggs are cheapest, the food consumed would cost $3.00 and wipe out the profits. We must either lower the cost of production or raise the price of the product.

### Marketing Eggs

The New York market, for the spring months, quotes duck-eggs at from thirty cents to thirty-five cents per dozen, notwithstanding the fact that they contain about twice the food value of hen-eggs, due to their large size. They cannot be marketed with other eggs or in an ordinary egg-case, as they require a larger case, and one would be obliged to keep enough ducks to be able to ship often, as duck-eggs deteriorate faster than other eggs. Nevertheless these are the two ways to make ducks pay:

(1) To produce eggs and meat for home consumption. Some of the best breeds for this purpose are the Pekin, Rouen and Indian Runner.

(2) To produce green ducks for market. The Pekin seems to be the favorite breed for this purpose.

Breeders require a good range and plenty of water, with an open, cheaply constructed building as a protection from winter storms. This should be kept dry with a litter of straw or shavings.

Usually one drake is kept for each four to six ducks, preferably a young, well-matured drake with older females, thus avoiding the danger of close inbreeding. In purchasing new birds, be sure they are from a flock of heavy layers, if you are breeding for eggs. Too little attention is also paid to the fact that good characteristics are transmitted through the male line quite as much or more than through the female line. For market ducks, one should select, as breeders, those making the largest and quickest growth.

### Growing and Fattening Rations

Young ducks should be fed soft feed only and have access to plenty of green food and drinking-water, but should not be allowed water for swimming until about six weeks old, or when nearly full feathered.

A good growing ration is as follows:

Corn-meal, 4 pounds; wheat-middlings, 1 pound; bran, 2 pounds; meat-scraps, 2 pounds; ground oats, 1 pound; with grit before them all the time. Ducks are naturally meat or fish eaters and to do their best must be fed largely on a meat diet.

To fatten young ducks for market, they should be separated from those intended as breeders at about seven to eight weeks of age, placed in a cool, shady place on small range and fed three times daily as follows: Wheat-bran, 10 pounds; corn-meal, 15 pounds; red-dog flour, 15 pounds; beef-scrap, 25 pounds; ground oats, 15 pounds; fed quite wet.

A good method of feeding breeders is to give them a wet mash in the morning of the following mixture:

Corn-meal, 70 pounds; bran, 15 pounds; wheat-middlings, 10 pounds; meat-scraps, 15 pounds; alfalfa-meal, 40 pounds; whole wheat, 25 pounds; whole oats, 15 pounds. Give plenty of green food at noon, unless on a green range. If this consists of beets or other roots, they should be run through a root-cutter and shaved fine.

The last feed at night consists of whole corn and wheat. Grit and shell should be kept before them at all times.

### Preparation for Market

Green ducks are usually marketed when they will dress five pounds, or at nine to ten weeks of age for Pekins. Dry picking is preferred by the fanciest markets, although scald picked will usually be accepted in most markets. Ducks should be killed when they show the least number of pin-feathers. After picking, they are placed in water at a temperature of sixty degrees for an hour and then in ice water, or, better yet, especially when dry picked, in cold air at sixty degrees and then cooled to about forty degrees. They can be packed in layers in barrels, but better in boxes, one dozen to a box, in two layers, backs together, so, no matter which side of the box is opened, the breasts are up.

Young ducks should be force-fed and sold as soon as they reach the proper size. As they are such great eaters, the per cent. of profit decreases rapidly after that time.

W. G. Krum.

## Food and Water Receptacle

Instead of opening cans containing tomatoes, peas or corn in the usual way, cut them open as shown in Fig. 1, along the dotted lines. After emptying the contents, bend back the tin as shown in Fig. 2 and

Fig. 1 Fig. 2

punch two holes to hang the can up by. Smooth the edges and you have, at no expense except your time, an article that is very useful as a feed or water receptacle for poultry of all ages. Mrs. H. A. Schneider.


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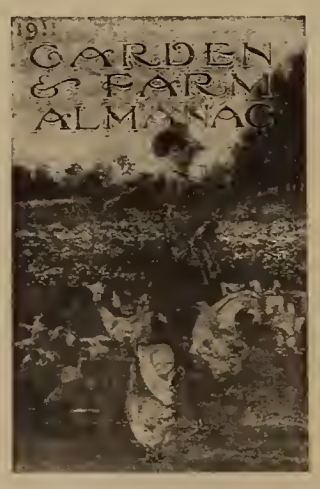


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# Farm Notes

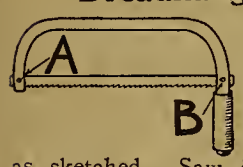
## A Market for Pea-Seed

THE cannery near my home, in central Indiana, has abandoned growing peas this season on account of the high price of seed-peas. Instead, they have substituted tomato-growing. There is certainly an attractive opportunity for farmers to realize a good sum in planting a few acres of peas expressly for seed purposes. The demand and price is sure to be high another year. An acre properly drilled and cared for should yield twenty bushels at least, and at one half the present price of seed it would return a greater sum than any other farm crop.

Peas for seed can be sown up to the middle of June, or if one sows them in corn in August, a fair crop can be secured. The Alaska is the great cropper for an early pea, and the English Fillbasket is a very productive second early. In sowing for seed, one should drill the seed in rows sufficiently far apart to allow the plants plenty of light and air, in order that the seed may mature well.

We believe farmers living near canneries could contract to grow seed for them at a very remunerative price. One-and-a-half bushels of seed per acre is sufficient if drilled in. J. H. HAYNES.

## Dreadnaught Buck-Saw




IF YOU want an indestructible buck saw frame, make it like this. Take a piece of one half or three fourths inch pipe, bend as sketched. Saw into short end with a hack-saw, and drill small hole (A) for a bolt. In handle end drill three one-fourth-inch holes and saw a groove through these holes for the saw blade, using adjustable hack-saw. Drill hole (B) for bolt. If hack-saw cuts do not come perfectly true and opposite each other, put saw frame in vise and with a pipe-wrench twist either way. Make the frame two to three inches wider than the saw is long and spring it shut to put the saw in. This frame will never warp.

You can fill the handle out with pieces of rubber hose. Put hose in boiling water to soften it, then drive it on and when dry it will never move. E. CLAUSSENIUS.

## To Get Rid of Milkweeds

THE milkweed on a farm is a general nuisance. It compares favorably with the country-store loafer, who is usually agreeable, reasonably well dressed and yet is invariably in the way. Just so with the milkweed, he comes in a time when he is not wanted, he makes quite a show, but only hinders the legitimate business of the wheat or corn.

The roots are deep, and whenever the plant is cut off, new plants spring up from the roots; hence, the plowing should be as shallow as possible and followed by disking and harrowing so as to expose as many roots as possible. If the field be turned into pasture, the milkweeds gradually lose their vitality and disappear. P. E. MCCLENEHAN.

## Three Good Hay-Rack Types

A WELL-PLANNED and well-built hay-rack, suitable for the land and roads on which it is used, is a source of constant satisfaction. In constructing a hay-rack, be careful to limit its width to at least twenty inches less than the width of the narrowest gate through which it must pass when loaded. The material should be strong and reasonably free from large knots, though not needlessly heavy.

### Rack for High-Wheeled Wagon

Figure 1 shows the framework of a rack suitable for a high-wheeled wagon. The

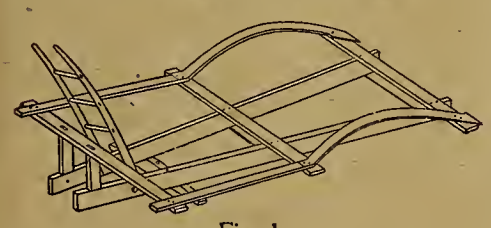


Fig. 1.

side-rails for the main frame are of two-and-one-half-by-six-inch material, fifteen feet long. These pieces should be straight-grained, yellow pine and poplar being two of the best varieties of timber. As they are closer together in front than the width of a wagon-box, almost as short a turn can be made as with a low-wheeled wagon.

The three main crosspieces are two-by-sixes, each six feet ten inches long. The pieces that form the bows or tops over the wheels are one-by-eight-inch elm, or any wood that is tough and will bend without breaking. These pieces should be put on while green or after they have been made pliable by soaking in water. The knees in the front, those supporting the crosspiece, are one foot long, not counting the tenons; the latter are six inches on one end and three on the other. The front should be made with a bolster attached to the frame, to take the place of the regular bolster, which should be removed from the wagon when wanted for the hay-frame.

The frame is put together with bolts of lengths suitable for fastening the different thicknesses of lumber. The ladder is made of two-by-three-inch material. A half-inch

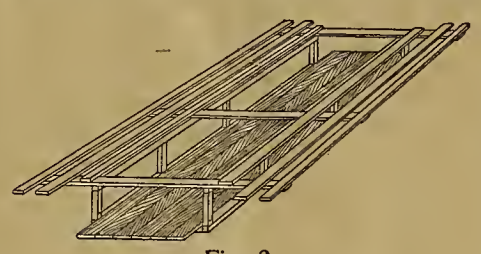


Fig. 2.

iron rod running through the bottom ends permits the ladder to be laid down when not in use.

### The Low-Down Flat Rack

Figure 2 shows the construction of a flat rack adapted for use on level land and smooth roads. It is built for use on a low-wheeled wagon, and when so used, it lessens the height to which the hay must be pitched. Though flat, the load is unlikely to tip as the center of gravity of even a high load is not far from the ground. The lightness of its construction is obvious. Ladders, not shown in the sketch, should be constructed at both ends, thus making the rack reversible. On this rack, as with all others, cleats should be nailed across the bottom, one just back of the front bolster and the other in front of the rear bolster. This wise precaution prevents the rack from slipping backward or forward on the trucks when going up or down hill. This type of rack can be quickly converted into a box rack by simply making four panels of fence-boards and bolting them around the sides.

### Rack for Hilly Farms

Figure 3 shows a very common and a very excellent type of rack for hilly farms and rough roads. This hay-rack sets on the wagon just as the wagon-body does. The sides, or wings, are removable. The two-by-sixes which support the rack-boards fit loosely into mortises in the body of the opposite side of the rack. The rack proper is, therefore, made of three pieces which are handled individually. Owing to the wedge-shaped character of the rack, the load settles compactly toward the center. The two-by fours at the rear end serve as a guide in building the load and fold down when the

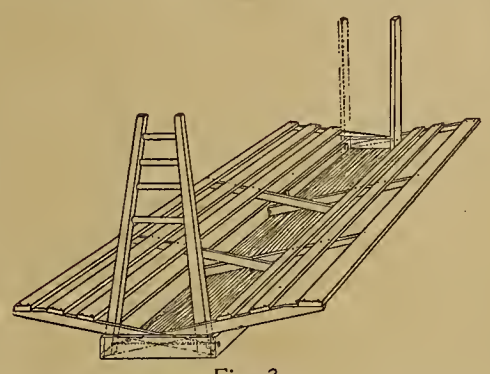


Fig. 3.

load is off. For hauling slippery marsh hay, this type is almost, if not quite, as satisfactory as a box rack. J. W. GRIFFIN.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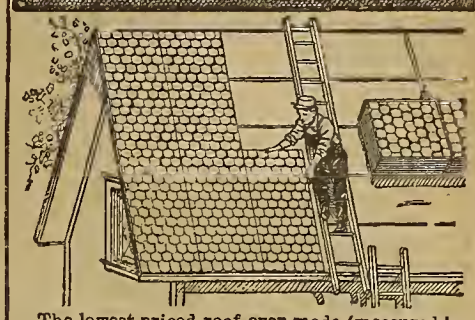

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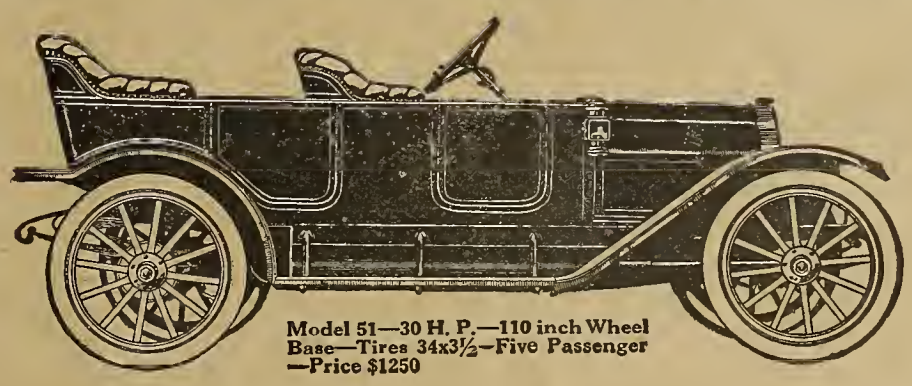

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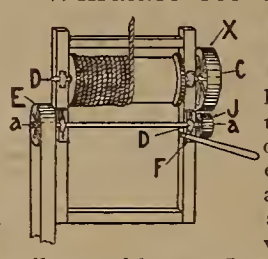
# Farm Notes

## Windlass for the Hay-Fork




Here is a sketch of a little windlass which I have constructed to unload hay by the use of our gasolene-engine. It consists of a drum mounted or a shaft and drive-shaft with the necessary pulleys and boxes. It works on the principle of the friction pulley. The frame should be built of four-by-four oak or other strong material and should be mounted on legs high enough to allow the pulleys to clear the ground. The drum is about three feet long and eighteen inches in diameter and may be made of two-inch plank cut in circles on a band-saw and nailed together until the desired length is gained. After the drum is mounted, it can be turned down on a lathe. The drum is hung on a one-and-one-fourth-inch shafting, upon one end of which is a collar, while the opposite end carries a large pulley about thirty inches in diameter and with a four-inch face. Just back of the shaft (D C) is hung another shaft (aa), one end of which carries a drive pulley (E), while on the other end is the small pulley (J).

This latter pulley is made of continuous thicknesses of paper cut in circles, bolted together between pulley collars and turned into shape on a lathe. This paper is about the thickness of ordinary pasteboard and may be had at any supply-house carrying machinists' tools. This pulley should be about one fourth of an inch from the large pulley (X) and should be about six inches in diameter, with a four-inch face. The boxing (D) is bolted to a two-inch piece which in turn is secured to the main frame by bolts set in two-inch slots giving it a little play.

Just back of the movable block (F) is a lever about five feet in length and hung in such a manner as to give it powerful leverage. To operate, start engine, which will revolve drive-shaft (aa). Pull on the lever, which in turn will force the small pulley against the large pulley (X), thus revolving the drum and winding up the rope. We have used this machine for several years, first with a five-horsepower gasolene-engine and later with an eight-horsepower engine, and it has given satisfaction. By its use we have saved unhitching the team from the wagon several times each day and in many ways we have found it useful.

Any man with a little mechanical ability can easily construct this windlass, and it will be found to save considerable time, as well as wear and tear on rope, for the motion is steady at all times. R. B. Moore.

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The farmer who is always in a hurry will find that life will always be stewing.

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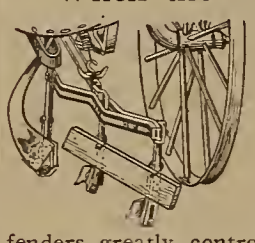
## When the Corn is Small



When cultivating corn the first time, even though the corn-plow is well provided with guards, more or less dirt and clods will fall upon the young plants. Of course, the guards or fenders greatly control this; but, with the different plows we have ever used, we have not yet found guards adequate to wholly eliminate the trouble.

A neighbor's genius, however, helped us in mitigating this trouble. He had contrived a little device shown in the sketch on one set of shovels. A casual observation sufficed in showing its practicability.

The plan is simple: A rather wide board, of sufficient length to reach from the fender to the rear, outside shovel on each gang, is procured. Auger-holes made at proper places in it, together with loops of wire, provide means of attachment to the shovel-beams. It is then attached horizontally, at such a height that, when the shovels are at average depth in the ground, the lower side of the board will be a few inches above the ground level. It is well, though not necessary, to have the board suspending from its attachment hinge-like, thus permitting the lower portion to swing outward or backward as the plowed-up soil passes beneath it. This tends to prevent clods or chunks of soil from being shot upward to drop over on the corn, yet at the same time permitting the free passage of loose earth beneath.

If the front shovels, when scouring nicely, frequently pitch a chunk of soil against the top of the fenders, allowing a portion to fall on the corn row, another board may be attached along the inside of the gang beams at about the height of the fender.

We have employed this method somewhat during the last two seasons with much satisfaction. Of course, here the plan can only be presented in a general way, as it must be altered and adjusted to conform with the structure of different machines.

P. C. Grose.


# How to Be Happy on July 5th

THERE are, in the Woman's Home Companion for June, practical suggestions for celebrating July 4th, which, if put into effect, would save arms, legs and lives in your neighborhood (perhaps in your own family) on Independance Day this year. And, what is more, the children would have a better time than they have ever had.

Between now and July 4th there is just the right amount of time for you readers of Farm and Fireside to do something about this matter in your neighborhood. Read the Woman's Home Companion for June, consider some of these suggestions, and bring some of them up in your church, in your lodge, or in whatever way is easiest. Make a fight for a clean and fine thing. The time is exactly at hand. It will do you good to take part in the movement. If you will carry this through in your neighborhood, you will be mighty happy on the Fifth of July. Last year there were some wonderful Fourth-of-July celebrations in different American towns in which no lives were lost and nobody was hurt. Read about them in the June Woman's Home Companion, and then do something. The attention of everybody needs to be called sharply to the Fifth of July.

AS YOU all know, The Crowell Publishing Company, which publishes Farm and Fireside, also publishes the Woman's Home Companion and The American Magazine. The Woman's Home Companion, with three quarters of a million circulation, is a famous woman's paper, the best in its field. It is a great home periodical—beautiful, interesting, instructive and exceedingly useful. It provides wonderful stories, special articles and departments—all fully illustrated. We shall have more to say about the Woman's Home Companion, both in a general way and in a specific way, in future issues of Farm and Fireside. The American Magazine, which has lately come into The Crowell Publishing Company, is that great illustrated monthly to which Ida M. Tarbell, Ray Stannard Baker, F. P. Dunne ("Mr. Dooley") and other journalists and story-tellers of national reputation contribute their work. It is a periodical having marked characteristics. Those who read it—and the number is growing very fast—choose it because of its distinctive qualities—energy, liveliness, candor, courage and humor. It is a periodical filled with facts, ideas, emotions and aspirations. It is an enthusiastic magazine, but it is a reasonable magazine.

THIS is a sort of family news column. These three great publications—Woman's Home Companion, The American Magazine and Farm and Fireside—constitute the family. The first is a great woman's periodical, the second a great national periodical of general interest, and the third a great farm paper. It is a wonderful triangle—the home, the nation and the farm.

Now the object of this column is very simple, very natural. It is intended that in it readers of Farm and Fireside will find news from the rest of the family—namely, news of the activities, contents and plans of the Woman's Home Companion and The American Magazine. Nothing could be plainer than the fact that both of these periodicals contain in every issue a great deal of good reading that readers of Farm and Fireside would seize upon eagerly if they only knew of its existence. To meet this perfectly natural need in a perfectly natural way is our intention.

We will send the Woman's Home Companion to any Farm and Fireside reader for a year for $1.50, and The American Magazine for a year for $1.50. We will send both the Woman's Home Companion and The American Magazine, each for a whole year, for the special price of $2.20.

**The Crowell Publishing Company**

**Springfield, Ohio**

## Live Stock and Dairy

### Keep the Pigs Growing

We have found that the first eight or ten weeks are about the most critical period in the life of the pig so far as growth is concerned. We have learned that it pays best to push the pigs from the start and to market them at the age of eight or nine months. Growth put on while the pig is young is made cheaper than can possibly be done at any later stage in its life.

The cheapest gains of all are made through the mother. For that reason it pays to feed her well. In our own practice, we get the sow out into the pasture as soon as possible. The green, succulent feed furnishes easily digested nutriment and puts the sow's system into the best possible physical condition, which enables her to make milk abundantly for the pigs.

As a milk-producing feed, corn alone never does very well except, possibly, when the sow is running on alfalfa or clover pasture. Even then the ration is most too starchy for best results. It produces fat on the sow rather than real growth on the pigs.

Tankage is the best supplement to corn. It is very high in protein and is just what is needed to balance the starchy nature of corn. The amount necessary to feed will vary according to the kind of pasture the sow has. If it is timothy or bluegrass or some other grass, about ten per cent. of the entire amount of grain fed should be tankage. If the pasture is alfalfa or clover or other legume, five per cent. will be enough. We feed tankage by stirring it up in water and feeding it in a trough before the corn is fed.

#### Feed Little Pigs Separately

The pigs will learn to eat by themselves at an early age. The little youngsters will begin to eat scattered kernels of corn from their mother's trough. As soon as they have done this, we feed our pigs separately, so that they can eat without danger of being trampled by the sows.

We usually partition off a corner of the yard, leaving the boards far enough apart, so that the pigs can crawl through very easily and the sows are kept out. Thus, by weaning-time, the pigs have learned to eat very nicely, and it makes that process much simpler and less likely to stunt their growth.

While the pigs are learning to eat, soaked corn does very nicely, alone, as the pigs will not eat enough to produce over-fatness. As soon as they will take any considerable amount, we prefer to mix some tankage with the soaked corn. Tankage should not be soaked with the corn, as it will ferment. We mix it in just before feeding-time.

Of course, tankage is not the only protein supplement suitable for pigs. Everybody knows what skim-milk will do for pigs. Shorts, or red-dog flour, are very much relished by pigs, and, as these feeds are quite high in protein, they make very satisfactory supplements. Oil-meal also does very well, but we never like to feed it to pigs on pasture except to mix a small amount of it with shorts, or red-dog flour.

#### Treatment for Lice

Pigs on grass are usually quite free from diseases and parasites. However, we always have to look out for lice. Whenever any lice are seen, we pen the pigs up in a small yard at the corner of the pen and daub crude oil on them with a broom. A splash on the face, one down the back and a couple on each side are all that is required.

Then the pigs which are crowded closely, by squirming and wriggling among the others, smear themselves quite thoroughly. We generally use the broom, although we have a dipping-tank. One man can apply the oil very quickly and effectively with a broom, and we prefer to do it this way, unless the number of pigs to be treated is quite large.

Water is another factor in keeping the pigs healthy and in a growing condition. We have an automatic drinking-fountain attached to a tank of pure well-water. This is located where the pigs can get to it at will.

H. E. McCartney.

### Interval Between Milkings

During the haying season very many general farmers, who keep a large number of cows, milk at four in the morning and at eight in the evening. This makes intervals of eight and sixteen hours between milkings.

While such a system is not one to be generally recommended, it is almost inevitable with the style of farming carried on in many localities. Yet much can be done to make the interval shorter.

On our own farm we always arranged it so that we could start work in the morning about an hour later than our neighbors; we milked between five and six. Then in the evening, instead of leaving the chores until the very last, when some extra work in the hay-field required attention, we had help enough to carry on the work, and still milk at the usual time, between six and seven. The only thing that was delayed was our six-o'clock supper, which was deferred until the last men were in. But this would happen only a few times a summer.

The reason we tried to milk more regularly than the neighbors was that we were convinced it was the only way to keep the milk-flow up to the maximum.

Last summer we kept our cows on but poor pasture, and fed them only a little grain on the side, yet during the season of severe drought, then prevalent, they kept up the flow of milk to a higher standard. Very few herds did the same. Wm. A. Freehoff.

### Influence of the Previous Sire

Every now and then I run across a farmer who says, "I'd like to breed this mare to a jack, but if the cross does not work, I can't breed her to a horse again." This same thing applies to a man who has bred a mare to a scrub horse at some time. When the value of a pure-bred sire is mentioned, he says that it will do no good, since the mare has once been bred to a scrub.

It is a very general opinion that, when a female has once been so "contaminated," she can never again bear pure offspring. I have known owners of small, pure-bred herds, that have accidentally been bred to some mongrel, to dispose of them for that reason, thinking that the herd could never be brought back to the old standard.

Hanging on to this old theory has caused a great deal of loss to many breeders in various ways. Owners of jacks, especially, have felt it keenly. But the opinion is still held to, and when one person hears of it, the way the statement spreads is wonderful.

Of late it has been found that this idea must be entirely discarded. Recently a certain Professor Eward conducted a long series of experiments in which he made many investigations along the line of breeding hybrids between zebras and horses. With the zebra, any influence of a previously used sire would show up even more readily than with a mule. Such a wide variety of types would be sure to show up if any such influence existed, but he has definitely proven that they do not come up. Thus you need not fear for the offspring when you breed to a horse after the mare has raised a mule, or to a pure-bred after the mare has raised a colt from a mongrel. C. A. Waugh.

### Take Several Tests

Never buy a cow on the strength of one test alone. I know a man who paid a fancy price for an animal just because her milk tested seven per cent. the evening he went to the owner to look the cow over. Later systematic tests developed the fact that she tested only about four per cent.

Few persons really know the variation in a cow's milk from milking to milking, and from day to day. Tests by different experiment stations have reported that cows, under conditions of unusual excitement, sometimes test as high as twelve per cent., and again they sometimes test less than two per cent., less than the legal requirement. Thus the only way in which a cow's value may be accurately judged is by the average of a series of tests. Wm. A. Freehoff.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# Live Stock and Dairy

## Dairy Rations in the South

Having lived in the South six years, working with milk stock most of the time, I have learned from experience some of the advantages as well as the disadvantages of dairying in the South.

Registered Jerseys, or as near thoroughbred as possible, seem to be the best for the South, as they eat less, are cleaner and more easily kept to an even milk-flow, and, being lighter in weight, do not feel the heat as the heavier breeds do.

We find that a herd of five or six is quite as profitable as one of ten, since one does then not need to depend on hired help. I do the milking, which I love, and my husband feeds everything on the place, including the cat and the chickens.

Here in the South there is green pasturage all the year and barns do not need to be such tight structures as in the North, as we have sunshine, and lots of it, at all seasons of the year. Corn can be planted in March, and soy beans early in May, between the rows of corn. Later the soy beans are ground at the mill, vine, bean, stalk and all. To one hundred pounds of this put one hundred pounds of cotton-seed meal and one hundred pounds of whole-corn meal, and feed at the rate of three pounds of this mixture to ten pounds of milk. This, with forty pounds of cow-pea hay, a good brushing daily and a clean bed, makes the milk-check look like money from home, besides giving you the pleasure of sweet, pure milk, rich and yellow from the green pasturage.

Oats can be sown the last of September and are soon ready for pasture. Let the cattle graze a few hours each day until the middle of March, then take them off and you can still have a good crop of oat-hay. Canadian peas also make a good winter crop, can be put into the silo or made into hay early in the spring and serve for a change from the oats. Alfalfa has also been raised successfully in a few places and will doubtless become a profitable crop. The velvet bean, too, makes fine pasturage and is a most remarkable builder of the soil.

For a large herd, cow-pea silage is excellent and a great milk-producer, while we have not been at all successful with corn-silage to increase the milk-flow. With the advantage of green pasturage during the entire year, the slight shelter needed and the variety of feed that can be raised, I believe southern Alabama is destined to become a great dairy country.

Mrs. J. R. Cross.

## Management of the Stallion

One of the most serious drawbacks to horse-breeding is the fact that a large percentage of mares fail to get in foal.

Percheron Stallion in Trim Condition

That a part of that failure is to be blamed to the stallion cannot be denied. The income from keeping a stallion depends largely upon his ability to get colts. When service fee is charged for colt to stand and suck, as is the usual custom, a stallion will be kept at a loss unless he is a satisfactory breeder.

### A Case of Bad Management

That care and management have much to do with the success of a horse to breed, was forcibly and clearly impressed upon the writer years ago when working in an importing stable. A considerable number of horses were returned every year because they had failed to breed. Without having investigated the cause of their supposed impotency, the horses were conditioned and sold to other buyers. No hint was given the men who bought those stallions that they had been pronounced failures as breeders by other men. A large number of horses were re-sold in this way, and nearly every one proved to be a satisfactory breeder.

A progressive farmer was asked last summer why he was patronizing a grade horse instead of a splendid-looking, big, pure-bred near-by.

This was his reply: "It is not the fact that the service fee for the grade is ten dollars and for the pure-bred twenty dollars. It is because the grade horse is a breeder and the other is not. I know that a colt from that pure-bred horse would be worth from fifty to one hundred dollars more at maturity than one from the grade, and I would gladly pay the difference in fee if I could get a colt. I bred my mares for two years to the pure-bred and didn't get a colt. I must either breed to the grade or not succeed in getting my mares with foal."

### Two Methods Compared

The difference in care and management of those two horses is worthy of a little consideration. The pure-bred was a horse of only fair size. Each season one of the most emphatic points on his posters was his extreme weight. In order for the horse to reach that weight he was always fed heavily of corn and other fattening feeds. The owner considered it altogether out of the question to work a stallion. A $2,500 horse doing farm-work looked as inconsiderate to him as a railroad magnate working on the section. As a consequence, the horse never received any exercise, except during the breeding season, when he was occasionally

Three Powerful Stallions at Work on a Corn Binder

given a short walk. He was kept in a dark box-stall away from all other horses. He had been imported four years previously, and each year he had become less and less sure, and the last season practically a failure.

The owner of the grade looked upon his horse in an entirely different manner. To him the stallion was neither an ornament to be pampered and petted, nor a wild beast to be feared. Rather, he looked upon the stallion as just a horse, to be treated as a horse, and to do the work of a horse. His horse was worked and he was more vigorous for it. He was stabled where he could see other horses and was more contented. He was fed simple feeds in not too large quantities, and because of that his system was in better tone and his general health more vigorous. Being a grade, of course, not a large number of mares were brought to him, but practically all were declared safe in foal before the season was over. These two horses are used as an illustration, not that the use of a grade is advocated, but because the results seem to show clearly that success or failure of a horse to breed depends in most cases upon care and management.

The owner of the pure-bred stallion has now become aware of the mistake he has made in handling his stallion and is taking some means to rectify the evil effects. He has had a quarter-acre lot fitted up for the horse. In this yard he lets the stallion run for several hours every day. It is a pleasure to watch the horse romping like a colt and getting needful exercise. His feed has been reduced, and, instead of a large proportion of corn, the horse gets oats, or oats and bran. The chances are that the stallion's impaired breeding powers will improve.

### Hard Work for the Stallion

Stallions ought to be worked. Draft-stallions are the biggest and strongest of all horse-kind and ought to do the heaviest work. Since the ultimate aim in draft-horse breeding is to produce a work-horse, the stallion himself ought to be tried out in the harness. There is always considerable comment or criticism regarding a stallion's wind, his limbs, his hocks, or his feet. What better way can there be of deciding in regard to those points than by working the horse every day?

On many farms there is almost constant work for a horse on a feed-wagon. Stallion-owners are utilizing this opportunity to put their stallions to work. By working the stallion, the keep of one horse will often be saved.

### Care of the Legs

It requires considerable experience to properly care for the legs of horses that have long hair or feather below the legs. The most important thing we ever learned in this regard is that washing does more harm than good. It causes the skin to chafe and crack. This permits the germs that cause scratches to get beneath the skin and furnishes, what is to them, an almost ideal place in which to live and multiply. Keep the legs clean

Close Quarters Destroy the Stallion's Vigor

by brushing with a stiff brush and dust on a little dry burnt alum-powder if any signs of scratches appear. This usually is all that need be done. If scratches ever get a start, we cleanse the hair by putting on coal-oil and rubbing it off with sawdust. Then we use sulphur mixed with enough oil, linseed or sweet, to make it pasty. This we rub in on the skin. The feet, too, need some attention to keep them properly trimmed and to guard against contracted heels and thrush.

The care of the stallion out of the service season is, of course, as important as it is during the season. H. E. McCartney.

## Points in Feeding Milo

Through the past season I fed about eighty bushels of milo to hogs and horses. Mr. Gordon, my co-worker on milo experiments here in southern Nebraska, fed out about the same amount. Milo is relished by both hogs and work-horses as much as corn. If threshed, the seed should be ground, though I fed mine whole and didn't see but that it was all assimilated. I fed as soon as threshed. We found that the grain had a slightly laxative effect, the opposite of Kafir-corn.

Gordon fed his milo to the stock in the bundle, a desirable way since it does not require grinding. When planted thin, heads ought to yield from one fifth to one half pint of grain, and when planted thick one tenth to one fifth pint. If allowed to fully ripen, there is little nourishment in the stalk, though you have the leaves, of course. If the stock are hungry, they will clean such stalks up before they will eat wheat-straw.

Though of the same feeding value otherwise, brown durra contains tannin, and my hogs didn't fancy this grain, though they would eat it if they saw no milo forthcoming. Kaoliangs (brown) seemed to be relished as much as milo; however, I fed but little and couldn't give a definite opinion. The only value of this plant lies in grain production (same branch of sorghum family as milo) and in extreme earliness—eighty-five days or even less. C. Bolles.

## Next Year's Brood-Sows

Just now is one of the best times to select the brood-sows for next year. There are two sources available. The old sows are now nursing their litters. It is a very easy matter to note the number of pigs each has farrowed, what the pigs are like and what kind of a mother she is making. From those three things one should be able to decide whether it will be profitable to keep her or not.

The other source of supplying sows for next year is from this spring's crop of pigs. By watching the little sows, noting their vigor, constitution, temperament and growth, together with what can be learned of their ancestry, one can quite accurately determine which should be used for breeding purposes.

By selecting the sows early, you secure the pick of the herd without any mistake. It enables one to improve his herd from year to year without expense, except for the mere mental effort of studying the animals.

H. E. McCartney.

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# Power of the Farmer's Pencil

## By Judson C. Welliver

There's no denying that the great American farmer has riz up in his best literary form and smote Congress with an awful avalanche of correspondence. The farmer isn't ordinarily a very enthusiastic letter-writer, but he's writing letters this spring all right, to his congressman; and most of them are on Canadian reciprocity.

If you ever doubted the respect of Congress for the farmer, forget it. Congress loves him—and his vote—with an affection as exalted as the zenith, as deep as the nadir, as expansive as space; the same being some affection. There is evidence that Congress loves the farmer more than the farmer loves Congress. The farmer doesn't seem to reciprocate. Reciprocity, it must be said, isn't in his line.

### Bona-Fide Letters Mean Business

Personally, as I have said before, I am not afraid of what reciprocity will do to the farmer. They're talking mostly about how it'll injure the price of wheat. When I asked Weather Wiser Willis Moore the other day whether he attributed the present shyness of rain to the pendency of the reciprocity bill, he allowed that my fears on that point were probably exaggerated. A judicious distribution of sunshine and showers through the wheat country for ten weeks to come will lower the price of wheat more, and raise the farmer's profits more, for this year, than a dozen new agricultural schedules.

But most of the farmers don't agree with me; that's plain as a pikestaff, and the letters that come to members of Congress make it mighty manifest that the real farmers are against the present reciprocity arrangement. There's no buncombe about these letters. They mean business, and Congress knows it.

When a statesman gets a printed petition, daintily couched in the glib diction of a general solicitor, with a lot of names at the bottom that look as if they were all signed with the same fountain-pen, he just grunts and introduces it as a matter of form. He knows that somebody with an ax to grind got up the form, paid for the printing, and probably hired somebody to circulate it. Folks are right accommodating about signing petitions. It's easier to sign than to refuse or argue. An old friend out in Iowa, who always signed every paper brought to him, once signed an earnest appeal to have himself hanged! He didn't worry to read it, and some of the boys, knowing his weakness, had put up the job on him.

But when fifty real, bona-fide letters come in a day from a congressional district, most of them written with lead-pencils, all telling Mr. Congressman not on his life to vote for a given measure, that is exceedingly meaningful. No two of them are alike. Manufactured opinion doesn't get far, but the spontaneous letter, written on a sheet of plain paper, with a few words misspelled—that's what acquires the Angora of the public man.

"That chap can't spell much better than I can," observed a senator yesterday, as he handed me one of this sort, "but he is a lot more certain what I ought to do about this vote than I am."

### The Republicans Will Be Blamed

One representative, a Republican who had voted for the reciprocity bill, received from one county in his district on the same day five letters. Four were from former supporters who said they were done with him; never would vote for him for dog-catcher. The fifth letter was signed by four ancient enemies who had always fought his nomination. It said that in view of his reciprocity vote he could count on them in future for any political services they could render. They were proud to have a representative with real convictions and nerve that needed no tonic!

"You can pay your money and take your choice," he remarked grimly.

The political effects of such a condition as seems to prevail among farmers throughout the country can only be conjectured. If the reciprocity measure becomes law, it will be passed with a great majority of Republicans in both houses voting against it, and an almost unanimous Democratic vote, in both houses, for it. Yet the Republicans are going to be blamed for it, because it was negotiated by a Republican president and supported by him!

Farmers' letters very generally make the point that if the Canadian-reciprocity bill is to pass, then they want the "farmers' free-list bill" or its equivalent passed, too, in order to be partially compensated for the protection taken away.

But the trouble is that the reciprocity bill is to pass, and the free-list bill is not. Let's see about this free-list bill. It provides for free admittance of all agricultural implements; burlaps, gunny cloths, jute bagging; iron or steel bands used for cotton-ties; wire for baling hay and straw; all leathers from bovines; harness, and the cut-up parts of shoes, ready to be sewed together; all wire fencing; all kinds of meats, fresh or preserved; flour, corn-meal, oatmeal and all prepared cereals; salt; all lumber, except the fancy kinds, like mahogany, satin-wood, and the like; sewing-machines and their parts.

That's a list of things whose free admission would actually mean something to the farmer. He wants 'em, too—except meats.

But there is no more intention of passing that free-list bill than of moving the Capitol to Medicine Hat. The bill will probably die in the Senate committee on finance.

Let us inquire what will occur if the expected happens: if the reciprocity measure passes and the free-list bill doesn't. First, the Republican party will be blamed. It will go into the presidential election with a tremendous handicap. The Democrats will elect the next president unless there is a striking change of sentiment. That is the opinion of almost all members of Congress—upper or lower house, Republicans or Democrats. They feel it in their bones.

The Democrats, thus coming into control, will probably pull the Senate over to their side.

### Let's Take the Elevator

Such a result would be accepted by the Democrats as a sweeping endorsement of their tariff policy. Their policy, mind you, includes the free-list bill and a lot of schedule revisions; it looks to establishment of the tariff system on a revenue basis.

If this is a protection community, it is not apparent how it has anything to gain by rebuking the Republicans for so little a thing as the Canadian-reciprocity measure, and then giving the Democrats general authorization to do about ten times as much damage to the protective system as the Republicans have dreamed of doing. However, that seems to be what the country is getting ready to do. To turn out the Republicans for Canadian reciprocity, and turn in the Democrats to reorganize the whole tariff theory, would be about as logical as to fire your doctor because he wanted to poultice a felon on your finger, and then hire a surgeon who would amputate your arm. But the country is getting ready to fire the doctor and hire the surgeon.

The Democrats are in a fine row over free wool. Their managers, in the House, want to reduce the raw-wool duty from eleven to six cents, and then append a sliding-scale plan, under which there would be an additional reduction of one cent per pound per annum until free wool was attained. The rank and file of Democrats want to put wool on the free list right away.

On that point there is sharp division, and the whole question of policy in tariff revision is involved. When Sir Robert Peel came to power in England, and undertook to wipe out the corn laws, he did not attempt to do it all at once. He didn't believe in duties on grains, but he knew that a flat proposal to abolish the duties would fail. It would be so revolutionary, so shocking to a long-established balance of commercial relations, that it might cause more disaster than benefit. So he compromised on a substantial immediate reduction and a sliding scale of future reductions, and got his legislation.

This matter of taking the duty off wool all at once reminds me of the situation of a man on the twentieth floor of a building. The elevator door is open. If he's in a hurry to get down, he can step into the shaft and drop down. He'll save time getting there, but will not feel like working much afterward. So with our tariff duties, or such as are keyed up to too high a pitch, we can step into the elevator shaft of instant abolition of tariff, and get down right suddenly; but it's liable to administer a very bad shock to the entire system. Personally—believing in free wool—I think it would be lots better to take the elevator and come down a few stories at a time, at length getting to the bottom without breaking all our bones or splattering up the place with small bits of remains. Certainly a man who doesn't believe in free wool will prefer this way of coming down, if he must come.

We seem to be well launched on an era of lower prices for the farmer's products, created by a more than ample supply. But if the Canadian-reciprocity bill passes, and then there is an epoch of lower prices for these very farm products affected by that bill, people are going to believe the revision did it, and people who don't believe it will be laughed out of countenance.

### How They Voted

The results of that condition are not difficult to perceive. Farmers are objecting to reciprocity, lest it injure their prices. They will get reciprocity and lower prices. They will argue that the prices came down *because* the duties came down.

The country will meanwhile have gone Democratic—this is the way the politicians figure it—and the downward-price movement will get to the bottom of its arc just about the time for the congressional election of 1914. The Republicans will get out and announce that Democratic tariff made low prices—and the people will reverse the movement, elect a Republican House, and commission it to restore the old standpat sort of tariff.

That's the way the old-line Republicans are thinking it will come out. They think it is better for the Democrats to carry the responsibility for the coming prospective era of lower prices. Right or wrong, this is a high-price country.

There ought to be a middle course that would permit reasonable reductions of duties now manifestly too high; that would utilize sliding-scale plans to cushion the shock; that would counsel and enforce moderation.

The Democratic managers are trying to carry out such a policy of moderation. It is commonly understood to be, at the bottom, Mr. Bryan's policy. They have given an excellent example of discipline in holding their forces together. For example, when the House voted on the free-list bill, every Democrat voted for it! The total vote was 236 for to 109 against. In addition to a solid Democratic vote for the measure, it also commanded the support of these Republicans:

Akin of New York, Anderson of Minnesota, Anthony of Kansas, Davis of Minnesota, Hanna of North Dakota, Hubbard of Iowa, Kent of California, Kopp of Wisconsin, La Follette (Wm.) of Washington, Lenroot of Wisconsin, Lindbergh of Minnesota, Madison of Kansas, Morse of Wisconsin, Murdock of Kansas, Nelson of Wisconsin, Norris of Nebraska, Steenerson of Minnesota, Volstead of Minnesota, Roberts of Nevada, Jackson of Kansas, Miller of Minnesota, Warburton of Washington, Helgeson of North Dakota. Berger of Wisconsin, Socialist, also supported the measure.

### The Situation in the Senate

With these exceptions, all Republicans voted against the bill. In other words, most of the Republican insurgents broke away from their party and stood with the solid Democratic force. Four men answered "present," but did not vote: Fornes (Democrat) of New York, Hayes (Republican) of California, Kipp (Democrat) of Pennsylvania, and Littleton (Democrat) of New York.

Eighty-five Republicans voted against the Republican president's bill; twenty-four Republicans voted for it. Every Democrat voted for the Republican president's bill. It is declared the most remarkable roll-call taken in the House in the memory of the oldest inhabitant.

When the Senate comes to these same bills, a very similar situation will be developed. The Democrats, with perhaps three exceptions, will vote for the Republican president's reciprocity measure; the Republicans, with about ten exceptions, will vote against it. The reciprocity bill will pass.

Then, just to complete the demoralization of the Republican party, Republican votes will kill the free-list bill entirely, beyond hope of resuscitation.

# Pa's Second Wife

## Mr. Hooper Solves His Home Problems

### By Mary E. Q. Brush

" . . . sitting astride the chopping-block"

Mrs. Silas P. Hooper was dishing up the supper with unusual energy. She stacked the steaming ears of sweet corn log-cabin fashion on the big, blue platter; gave vindictive stabs with a fork into the potatoes, as she took them, one by one, from the kettle; she placed the fat, brown-glazed teapot with noisy clatter on the square, pink tile, where it confronted a solemn row of waiting cups and saucers. Then, after allowing her sharp, black eyes to give one roving glance over the white expanse of the table to see if anything were lacking, she went to the open back door and called out in shrill, imperious tones, "Come, pa; it's ready!"

Her father-in-law, sitting astride the chopping-block out in the rear yard, started nervously at the sudden summons.

"I swanny!" he muttered. "Mandy's voice always makes me think of a hull kit o' carpenter's tools—file, saw, plane an' bit—everything that cuts, rasps an' digs into things! An' jest now, she's specially mad, I s'pose; but I've got to face th' music."

He swung one lean leg over to its mate on the other side of the log and closed his jack-knife with a snap; he had been aimlessly whittling for the past quarter of an hour.

It was not the habit of the elder Mr. Hooper to waste much time in this frivolous amusement. Usually at this hour he was driving the cows into the barn-yard, feeding the hens or doing odd jobs about the premises. Generally, too, he had on his working-clothes; but on this particular evening, having done the chores in haste, he had donned his Sunday-go-to-meeting garments, a well-worn broadcloth suit made after a fashion of twenty years previous; his shirt-front was as stiff and well glazed as a china saucer; his collar came up in sharp points under his tuft of scraggly, gray chin-whiskers, while his neck was swathed in an antique, black satin stock. In short, he looked very festive, this quiet, gentle, old man, with his small, delicate face, and eyes, blue and kindly, that had in them something of the pathetic look of a lonely child.

"Shouldn't wonder if we'd have a frost soon's new moon comes; it's gittin' reel chilly now when th' sun goes down," he volunteered in a conciliatory tone, as he sank clumsily into his chair at the table. Young Mrs. Hooper gave a sniff.

"Chilly! Most folks *would* be chilly settin' out like a bump on a log this time o' day," she remarked frigidly as she tucked a bib under the baby's chin.

Mr. Hooper, senior, feeling instinctively that the clouds of war were gathering on the near horizon, meekly subsided, and began, with fingers that trembled a little, to peel and mash his potato. His son, Silas P., sat opposite—a swarthy, dark-eyed man with a sullen face and taciturn manner.

The meal progressed in gloomy silence, the baby being the only talkative member of the family and emphasizing his unintelligible monologue by sundry thumps with his spoon.

Meanwhile, the elder Mr. Hooper ate as though he were performing a solemn and somewhat painful duty; he was timid and ill at ease, and once, when he accidentally dropped a bit of apple-sauce on the table-cloth, he shot an alarmed glance at his daughter-in-law; then, as though in a great hurry to be through with a bad business, he poured his hot tea into his saucer, drinking it in hasty gulps, and when the last drop was down, he glanced at the clock, at the door, at his son and the latter's wife, and then he rose awkwardly from his chair.

"'Silas Hooper, are you crazy? . . . Do you know what you've done?'"

"I—I—s'pose, Silas—that is, I must—I might as well be a-goin'," he began nervously. "The—the ceremony was to be at eight o'clock, an' it'll take me a good twenty minutes to walk over to Mis'—ah—Mis' Wiggins's."

"Well, if you're possessed to go, there ain't no occasion to walk; you might hitch up old Jerry," snapped out his son.

The bent figure straightened itself with sudden dignity.

"After the things you an' Mandy hev said, I ain't a-goin' to take none of your horses or buggies," he said chokingly.

"Humph! I s'pose, though," Mrs. Hooper broke in with an aggrieved voice, "I s'pose it won't be long before you an' that woman—that Mis' Wiggins'll be wantin' to take some o' Silas's ma's things. If you be, I'd like to know first when you're comin'. That woman needn't think she can go traipsin' through *my* house any time she wants to—so there!"

Her father-in-law moved uneasily toward the door, reaching out for its knob in an uncertain way.

"You needn't git stirred up fur nothin', Mandy. I don't know's I'll take away any of Silas's ma's things; the furniture an' everything was bought with money I earned, of course, but land! I don't begredge any of 'em to you an' Silas and—and—th' little feller here"—as the gnarled hand left the door-knob and rested in a benedictory way upon the curly head of the occupant of the high chair, who looked up with a smile and a gracious something which sounded like, "G'andad! Nice g'andad!"

He went out, closing the door gently.

His son sat silently in the chair, his eyes stern and his arms folded across his stalwart breast.

Mrs. Hooper, oblivious to the baby's evident consternation at her unusual conduct, flung her apron over her head and began to sob half-hysterically.

"There he goes, the old fool!" she gasped. "I don't want to call your father names, Silas, but to think what he's going to do—marry at his age! After we've been so kind to him, too, an' me a-mendin' his clothes an' fixin' boneset tea for him when he wa'n't feelin' well. That Mis' Wiggins is nothin' but a schemer, she is, an' I'll bet a tenpenny nail that she'll put him up to gittin' some o' your mother's things. No doubt that Mis' Wiggins'll lay her hands on whatever she can git, and what'd your mother—"

"His mother's old doctor-book was brought from the attic"

"Hush, Mandy," was the not unkind command.

The stern look had returned to Silas's face; he was staring fixedly at a picture on the wall—a cheap, ordinary crayon portrait of a middle-aged woman, thin and worn, with a somewhat peevish expression about the small, pursed-up lips.

"I have been told that pa knew Mis' Wiggins some years 'fore he married ma," he said musingly, an' that he paid her considerable attention; indeed, he kinder hinted as much t'other day."

Mrs. Hooper gave her head a little toss.

"So he did to me, an' he was real kittenish an' silly about it when he told me. Well, there's no fool like an old fool, they say. But I do think that a man o' his years ought to be more sensible. One spell I did git to hopin' that he'd given up the notion of marryin', but when I seen him hangin' over the fence this mornin' talkin' to Dominie Ely, an' when he hurried around all day like a pea on a hot skillet, doin' up the chores, blackin' his boots an' brushin' that antediluvian coat o' his, says I to myself, 'I'll bet that in less than twenty-four hours there won't be any Mis' Wiggins, but there'll be another Mis' Hooper!' So I wa'n't a bit surprised when Sally Hilts—she's sister to Alviry Lane—run over and hinted that pa was to be married this evenin' an' wanted to know if you an' me wa'n't goin' to th' weddin'."

"Weddin'? Not much!" growled her husband. "Pa edged around and suggested that he'd like to have us come. Of course, he would, jest to make folks think that we countenanced his folly. But, no sir—*ee!* I tell you what, Mandy"—here the big fist came down upon the table with a thud that jarred all the dishes—"I tell you what, pa and his bride'll git a cold welcome if they come to see us."

"I hope you'll stick to that resolution, Silas," in purring approval. "I am sure about myself, but I ain't so sure about you; Mis' Wiggins is one o' them smilin', buxom widows who knows jest how to bewitch a man, and, my land! I don't know why it is, but 'most everybody that's said anything about her to me praised her up sky-high."

"Pshaw!" was the only rejoinder to this and then Mr. Hooper, junior, lifted up the baby, whose head had been nodding like a clover-tuft in the wind, and sat down to rock him to sleep, singing in a deep, mellow voice a lullaby of long ago—the same that the original of the crayon portrait used to sing to him, the baby's father.

Meanwhile, far down the road, in the little, white cottage just on the outskirts of Higby's Corners, old Dominie Ely, with hands uplifted reverently over bowed heads as gray as his own, was saying in quavering tones, "I now pronounce you husband and wife—and may the Lord add his blessing. Amen!"

Mrs. Silas Hooper, senior, was round and rosy, with merry, blue eyes and with hair that lay in soft, white waves and puffs on each side of her apple-red cheeks; she wore gowns of black or gray or warm brown, always with spotless, white kerchief folded Quaker-fashion across her ample bosom. Her step was sprightly in spite of her generous proportions; her voice had a cheery ring in it; her laugh alone was enough to drive away a "fit of the blues." Her neatness, serene temper, alert glance and deft manner of doing things made one think of an ideal nurse.

Indeed, since the death of Mr. Wiggins, some twelve years previous, nursing had been her profession. She dearly loved the work so repugnant to some; her heart was as generous as her figure and it was always filled with love and pity for the sick, the sad and the lonely. So it was not surprising that she felt a deep interest in Silas Hooper, senior. Moreover, as has been hinted, years and years ago, there had been a certain little romance remembered faintly by only the oldest inhabitants. And now old Silas was alone—merely tolerated in the home of his son—and so tender-hearted Mrs. Wiggins sought to make him happy.

"He's as forlorn as a wet hen, and forlorner," was her pitying, though unpoetical, simile. "Young Silas an' his wife don't think of anybody but themselves an' that nice, little baby of theirs. Course, I can't blame 'em, I s'pose, but, my land! old folks need coddlin' as well as babies."

Certainly to the aged bridegroom the 'coddling' was most gratifying. "Mandy would never remember that I can't eat toast unless it's softened in hot milk; she said she despised bean-soup, an' I've always thought it was fit for a king. An' then"—here Mr. Hooper waxed emphatic—"an' then, Great Scott! I must say there's nothin' like stretchin' one's legs under one's own table! 'Sides now if I want to pour my tea into my sasser or eat with my knife, like I learned to when I was little, there's nobody to find fault. Mis' Wig—my wife, I mean—she only chuckles an' says, 'Suit yourself, my dear.' An' I tell you I *be* suited! I ain't been so happy sence I went fishin' sixty years ago an' ketched my first string o' suckers!"

Everybody said Mr. Hooper looked ten years younger since his marriage; the ragged ends of his hair and beard were neatly trimmed—his wife did that, with a towel tied around his neck; she persuaded him to give his ancient broadcloth suit to a needy tramp and to buy one of fashionable make and material. Moreover, one of the results of her good cooking was to make his exceedingly lean figure gradually round out into firm and portly curves.

" . . . his hair and beard were neatly trimmed . . ."

But for one thing old Mr. Hooper's cup of joy would have been full. That one thing was the estrangement from his son's family. Ever since the night of the wedding the younger Silas had treated his father with but scant courtesy. And when the two Mrs. Hoopers met at church or on the street, frost was in the air—that is as far as the younger woman was concerned. For, as she stoutly maintained, "I shall always believe that that fat, old, red-cheeked nurse inveigled pa into marrying her; a regular bewitchment it was. I've been expectin' she'd send for some o' Silas's mother's things, but she ain't done it yet. Folks say she's got property of her own—a thousand dollars, life-insurance from Wiggins an' a house 'n lot of her own she rents, over in Winchester, for two hundred dollars a year, besides money in the bank she's saved by nursin'. But I don't believe it. I sha'n't have anything to do with her; and no more will Silas."

Now it wasn't twenty-four hours after this speech that the maker thereof came to grief by means of a broken step in the outside cellar-way.

"I must say that if pa had been here, them steps would have been mended long ago," was young Mrs. Hooper's tearful outburst when her remorseful husband, assisted by a kind neighbor, carried her into the house.

Since his departure, however, she had been brought to a realization of his usefulness in small matters. Silas, junior, absorbed in the raising of fine stock and big crops, had no time to spend over knobless doors and cracked window-panes. Such minor matters he had left to the attention of his father.

A bruised shoulder and a sprained ankle proved to be the result of her unlucky tumble, and for several days she was forced to lie on the couch in the sitting-room, hourly consumed by contempt, pity and indignation as she watched her husband's attempts at housework.

"Silas Hooper! are you crazy?" she exclaimed tartly on the second morning. "Do you know what you've done, man alive? You've gone an' stirred up the pancake-batter with plaster of Paris instead of buckwheat flour!"

"Great guns, Mandy! Don't scold any more! I've lost ten pounds of solid flesh these last two days. 'Tain't my sphere, this doin' housework! Of all the puddlin', fussy, do-it-over-an'-over-agin occupations, it's the very worst! But I suppose I *was* sort of absent-minded this mornin', because of little Si."

"The baby—*hurt?*" and in her agitation, Mrs. Hooper strove to rise to a sitting posture.

"There! there! don't spring up like that. Little Si is in the crib there all right; only he seems to have a cold or something."

[CONCLUDED ON PAGE 20]

"'Good-evenin', Silas . . . I thought I'd come, too, an' — an' —

# The Home Interests' Club

## By Margaret E. Sangster

THE club met on a bright afternoon in June and greetings were cordially exchanged, and as one and another slipped into place an air of agreeable anticipation was obvious. The hostess of the occasion had provided lemonade and cake, and her little daughters, hovering in the background and tiptoeing now and then to the door of the large, cheerful living-room, were hoping for the moment when refreshments should be served. Their mother finally signed to them to run away until they should be sent for. They felt the importance of their position as waitresses on their mother's guests, and the elder child audibly cautioned her sister not to climb a tree or get a spot upon her dainty white frock until after the meeting of the club.

The preliminaries being duly and properly conducted, the Home Interests' Club soon found itself embarked in a consideration of purely domestic topics.

### The Kitchen is Discussed

One of these had to do with the kitchen. Most housekeepers are convinced that the kitchen is the real heart of the home. Unless we have good bread; well-cooked meat; light, fluffy pastry; nutritious fruit; excellent puddings, and food in appetizing variety, we shall certainly face the horrors of indigestion and chronic ill temper in our husbands and children, to say nothing of ourselves. Catering is a fine art.

There used to be a Spartan rule, amazingly stupid, that every child in the family must eat whatever was set on his or her individual plate. While fussiness as to food should not be encouraged, there can be no greater mistake than to compel man, woman or child to eat food from which the appetite turns with aversion. A pronounced dislike, for example, to a particular article of diet indicates an idiosyncrasy against it. There are people who are poisoned by strawberries, although Charles Lamb never said a truer word than when he told us for all time that God might have made something better than the strawberry, but God never did.

The person who turns with disgust from a dish that another finds delicious has a deeply rooted reason in the physical life or, it may be, an inherited peculiarity of taste which accounts for the dislike. While children should be trained in good manners at the table, so that they shall not exploit their likes or dislikes, they should never be forced to eat vegetables, fruit or fish from which they instinctively turn away. One often meets an inability to partake of deviled crabs, lobster salad or oysters in any form. There are people who cannot remain comfortably in the room with a banana.

### What One Mother Thinks

Speaking on this topic, one of the members asserted her conviction that various tastes in a family should be considered in arranging the family bill of fare. She affirmed her opinion that the kitchen was the place in which questions of health, comfort and amiability for the entire family were to be settled. As for the parlor, it might be left for functions of ceremony, for great events in the family, a background for courtship and a setting for weddings, but it was far less important than the kitchen.

That the kitchen should be spacious, sunny, homey and convenient should go without saying. Unfortunately, this speaker declared, with emphasis, it was often dark, ill adjusted to meet the needs of the women who spent most of their daylight there, and, to put it plainly, it was out of date in the twentieth century.

The doctor's wife had been listening intently to the remarks just completed, and now, addressing the Chair, she asked permission to read a description of an English kitchen of the Middle Victorian period. She had noticed lying on a table close to her hand Arnold Bennett's remarkable novel, "The Old Wives' Tale." Opening it, she turned to the following sentences: "Maggie had been at the shop since before the creation of Constance and Sophia. She lived seventeen hours of each day in an underground kitchen and larder, and the other seven in an attic, never going out except to chapel on Sunday evenings, and once a month on Thursday afternoons." Poor Maggie!

In the annals of slavery few conditions can be found worse than this, in which, for years, a woman spent her life of service.

"We have nothing," said the doctor's wife, "in our more fortunate environment to compare with these gloomy caves of Old England, many of which may still be found in her ancestral halls. Our kitchens are above ground, but there are farmhouses in which the work is carried on to the manifest disadvantage of the housewife and her daughters. As for domestic help, we women who live in the country do not depend upon it very much. We secure it if we can, but our own Annies and Dollies and Margarets and Marys help their mothers and take lessons in good housekeeping from the time that they are old enough to carry a cup and saucer safely from the kitchen sink to the kitchen table. In rural districts we are less able to secure trained servants than our city cousins are, and although it is one of our grievances in that while the farmer has his hired men in the fields in summer, we cannot with equal ease obtain women to help us, still we are in a manner able to help ourselves.

"We have no underground kitchens, but think of it, friends, how many needless steps we take from the kitchen to the cellar, down steep and narrow stairways often unguarded by a rail, and how many times the distance from the dairy is either too great or the path is unprotected from the weather. Perhaps the dairy itself is several steps down from the kitchen. When we think of the feminine physical organization and the inconvenience and difficulty incidental to domestic work in the majority of houses, we cannot be surprised that so many of us become nervous invalids before we reach the meridian."

### Low Sinks and Backaches

"I heard you say something about the sink," exclaimed little Mrs. Madison, springing impulsively to her feet. "My height happens to be that of the average child of thirteen, and, although I deplore the fact that I am in very truth a little woman, I congratulate myself that I can stand at my sink and wash my dishes without being tired half to death. The ordinary woman goes through a back-breaking process whenever she conducts operations at the kitchen sink. It is invariably too low to enable her to work with ease. Why do we allow builders, architects and people in general, who plan and erect our homes, to go on age after age bestowing care everywhere else while any sort of cubby-hole is supposed good enough for the home kitchen?"

"The answer is easily evident," said a lady who had not hitherto spoken. "We women are conservative by nature and training. I sometimes think that all around the globe women are disposed to care too much about show and too little for reality. Lace curtains in the parlor, fresh paper on the walls, nice clothes for the children we are determined to have, but we save in the wrong places and practise the sort of economy that has been called penny-wise and pound-foolish. The multiplicity of doors in some old-fashioned kitchens is, however, not a defect, as doors lead to every other part of the house. As it used to be said, 'all roads lead to Rome,' it may now be said, 'all roads lead to the kitchen.'"

Two or three club-members dissented from this presentation of the case. "Doors," said one with emphasis, "are perfect death-traps. My great-aunt Sarah, who was paying me a visit last year, opened the door leading into the cellar, and, as you all remember, fell from the top to the bottom of a steep staircase, and is crippled for the rest of her life. It was a miracle that she was not killed. Of course, there had to be a door to go downstairs, and had it been the only one or had there been but two, she would not have made the mistake she did. My kitchen has five doors, and there are three too many."

### Grandmother Takes the Affirmative

Upon this followed several reminiscences of accidents attributed to doors, but before the discussion waxed to intemperate heat one of the grandmothers interposed.

"Don't quarrel with your doors," she said. "The older I am, the more thoroughly I believe in doors and windows and ways of exit from the rooms where we carry on our work. We ought to be careful about our locks and bolts, and until we are familiar with the ins and outs of a house we ought not to take risks. Everything that has been said to-day about the kitchen I endorse. What are we going to do in the matter? Some of us might as well as not have water introduced by pipes into the kitchen, but we do not trouble the men-folk on the subject, and so we go on using a hand-pump precisely as if there were no modern conveniences. Our talk will stir us up, but if it is to amount to anything, we must get at our Henrys and Johns and Jacobs and make them see that we need tools and contrivances and inventions exactly as they do to work with. A good many of us have only to say what we want to have it done for us without much delay.

"The American husband means to please his wife and help her if he can. It is not his fault that she often wears herself out without his imagining that there is anything he can do to help her."

### How Can I Get Rid of Ants?

"I wish," said a plaintive voice that issued from a corner where a timid little bride had tucked herself out of sight, "that somebody would tell me how to get rid of a plague of ants."

"Black ones or red?" cried a chorus of voices.

"Both," was the reply. "The black ants march in procession over the kitchen door-sill, and the red ants are in my closets. I cannot get rid of them."

"Scrub and scour your shelves, my dear, pour boiling water over them freely and sprinkle borax everywhere. You will soon be deserted by these tiny pests."

"Once," said the minister's wife, "I spent some years in the South, where the days were intensely hot in the summer. I had to fight with a variety of insect pests, ants among them. For weeks at a time I could keep the food safe from ants by insulating every receptacle in water. My refrigerator had a pan of water under each of its supports. Every bowl and jar containing anything edible had to stand in a pan of water. I was calling on one of Dick's parishioners one afternoon, and she offered me a plate and napkin and then brought out her golden sponge-cake. I could not touch it, but when I declined, she tranquilly took a piece herself, saying, 'I have a soul above ants.'"

Fine wire screens should be carefully set over food in the summer, and it should not be forgotten that blanc-mange, custards and jellies ought never to be left long uncovered, since they are attractive to the various germs that invisibly float through the air.

A house that is thoroughly screened will be immune from the incursions of flies and mosquitoes, and insect plagues of every description will disappear if cleanliness is thorough and radical. We who are older can tell young housekeepers, particularly if they begin their married lives as Mrs. W. has, in a house that has been long inhabited, that they must be prepared to exercise greater vigilance than if they lived in a new one. Still, woman's energy and painstaking will enable her to win the day if she does not relax her care at the beginning of the season.

"I met a dear old lady at Asheville, North Carolina, on a June day much like this," said the principal of the school. "I was attending an educational convention. The dear lady whom I remember was a sort of queen, benignant and matronly. Her home was in New Orleans. A young girl who knew her very well told us on the veranda one day that Mrs. L.'s house always possessed a wonderful fragrance. 'You smell roses,' she said, 'whenever you enter the door.' Everyone clamored to know the secret of this fragrance. The old lady laughed and gave the answer or the recipe in three words: 'Soap and water.'"

### In Which All Partake

By this time the children of the house had returned and the refreshments, lemonade, in which pineapple and strawberries had been mingled, and cake that might have taken a prize for lightness and sweetness at the county fair, were passed, while conversation, retreating from special themes, glided into cheerful neighborhood gossip. Everyone was delighted to know that Johnnie F. had taken the highest honors at Princeton, that Susan B. had decided not to study medicine at Cornell until she had given her mother a twelve-month of companionship at home, and that Alice S. had received a legacy from abroad. Good news travels as rapidly as bad, and all along the countryside we are delighted to hear that something pleasant has happened in the home of a neighbor. The club separated with the usual good wishes.

The breath of June was perfumed with roses and the sky was golden in the sunset light as the friends who cared most for a private parting word took their way homeward. They felt that they had been lifted out of the rut and had received sympathy and stimulus in the hours of the afternoon. The best thing a woman's club does for its members is that it saves them from being self-centered and enables them to see other points of view than their own.

As for the husbands they discovered that the supper awaiting them was as well flavored and nicely served as if the women folk had devoted the whole day to its preparation. The antiquated idea that woman shall always stay indoors is no longer in vogue. It has in fact become obsolete.

Everyone approved of the breadth and good temper of the afternoon's arguments and discussions.

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# The Housewife's Club

## A Page of Helpful Household Suggestions and Recipes

### Contributed by Our Readers

**A Buttonhole in a Minute**

Here is a sewing hint which will no doubt be welcomed by busy mothers. To make this strong, durable buttonhole, use tape three sixteenths of an inch wide. Make a straight mark the exact length you wish the hole to be, place end of tape at back of hole mark, and on the machine stitch close to edge of tape. Hold the tape so it will be close to mark, but not cover it. At the front end leave the needle down through the work to hold it while turning, take two or three stitches while rounding the end and bring tape around and stitch back down opposite side of mark. Lap the ends at the back and stitch across to fasten. If preferred, the rounded end may be snipped until it lies flat, then stitch the outer edge, also, and cut open on the mark. These buttonholes are very strong, and one can make them in many sets of underwear in a short time.

Mrs. D. I. Y., Utah.

**Currant-Custard Pie**

One cupful of ripe currants, mashed and strained, the yolks of two eggs, one cupful of sugar, one cupful of cream (or sweet milk) and one tablespoonful of flour. Bake in one crust and frost with the whites of two eggs and two tablespoonfuls of powdered sugar. If preferred, strawberries or cherries may be used in place of currants.

Mrs. F. M. R., New York.

**A Suggestion Worth Knowing**

Do not despair if the hot-water bottle springs a leak, and above all things do not throw it away, for it makes the best sort of a hot-salt bag. Put salt in a basin and heat it in the oven, then fill bottle with the hot salt by means of a funnel. This will be found very valuable when a dry heat is required. Then, too, it is so nice when the children need hot applications, for there is no danger of hot water escaping and burning them. The salt can be saved each time and reheated when needed.

Mrs. M. H. B., New York.

**A "Jumper" for Baby**

This home-made baby-jumper, which I invented myself, is a source of great comfort to me. When baby is in it, I feel easy in my mind, because I know she cannot fall out and hurt herself. The seat is half a market basket, padded and covered, and the barrel-hoop above is wrapped with the same kind of material that is used to cover the basket. Adjust it so that baby's feet just touch the floor. In this way she can swing herself. She cannot bear her weight on her feet enough to make her legs crooked, and she cannot possibly fall out. The jumper is suspended from a hook, which is fastened to a spring in the ceiling. When the weather is pleasant, the jumper can be hung on the limb of a tree and baby can stay out in the fresh air.

Mrs. T. B. G., Georgia.

**Three Household Hints**

To remove ink-stains from a carpet, pour milk over the spots and rub it in with the fingers. Then scrub the spots with soap and warm soft water, to which two tablespoonfuls of ammonia have been added.

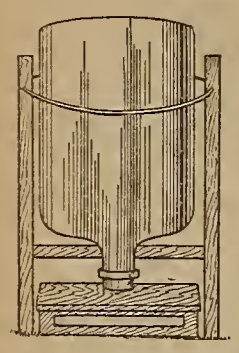
Salt sprinkled on the floor of the oven will prevent cakes, etc., from burning on the bottom.

If a few drops of lemon juice are added to the whites of eggs, they will whip much more quickly.

Mrs. E. S., South Dakota.

**Improved Drinking-Fountain for the Chickens**

Most everyone is familiar with the principle of this fountain, for it has been used for a great many years. My improvement is the box or fountain arranged so that the fowls cannot get into it with their feet. A jug is an excellent thing in which to keep the water, as you do not have to fill it every few minutes. Take a tin box and cut a slot lengthwise of the box as shown in the illustration, also across the ends. This is the place where the chicks drink. Then take a piece of tin or a thin board and bore a hole through the top for the quill which carries the water to the fountain from the jug. This board goes across the top of the box, as shown in the illustration. Do not fasten it on, for occasionally the box should be scalded out. This makes it easy to clean. Drive a frame in the ground where you wish the fountain. Nail two supports to the frame to hold up the jug, which should be fitted with a good cork. Bore a hole through the middle of the cork and put a quill through it to convey the water to the fountain. The quill should come about one eighth of an inch below the drinking-slot.



Mrs. J. R. M., Missouri.

**Corn Pudding**

This is a delicious dish of old-time Southern cookery. Take a quart of corn, either canned or cut fresh from the cob; the fresh is preferable. Beat four eggs, whites and yolks separately. To the yolks add a tablespoonful of sugar, two of butter and one quart of milk. Season to taste with salt and white pepper, stir in the corn and, lastly, the stiff whites. Pour into a buttered pudding-dish, and bake an hour in a moderate oven. Serve with roast beef or fowl.

Mrs. G. L. S., New York.

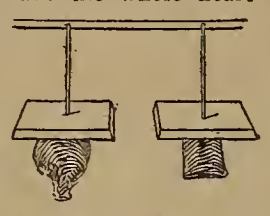
**Coffee-Ginger Cookies**

Mix one cupful of shortening with two cupfuls of white sugar, add one cupful of New Orleans molasses and three teaspoonfuls of soda in one cupful of hot black coffee. Let mixture cool, then add one well-beaten egg, two teaspoonfuls of vanilla, a pinch of salt and three teaspoonfuls of ginger sifted with flour enough to roll out to make a soft dough. Cut out, and bake in a quick oven. These are splendid.

Mrs. C. M., Ohio.

**Safe Way to Hang Hams**

For years we were pestered with rats in the smoke-house. Sometimes they would have the whole heart eaten out of a ham before we discovered it. At last I thought of a plan that worked like a charm. The meat was hung on wires and over each piece of meat a piece of tin with a hole punched in the center was slipped on the wire. Old pans or any old tin hammered out a little will answer the purpose.



Mrs. E. M. I., Virginia.

**Tobacco for House-Plants**

Some of my house-plants looked wilted on my return from a three weeks' absence. The leaves were turning yellow, the tips of some geranium branches were dried and blackened. One young geranium was almost dead. I suspected angleworms. A big handful of tobacco-leaves was steeped in hot water, enough to wet about a dozen six-inch pots, and the plants were watered with the infusion. A little later some dry tobacco-leaves were crumbled and worked into the top layer of earth in each pot. This was a month ago. The plants are strong and vigorous now. Tobacco is a fine fertilizer for plants, as well as a worm and insect destroyer.

S. H. L., New York.

**To Keep Cut Flowers**

Cut flowers may be kept for an abnormally long period by burning their stems with a piece of wood. Do not use a match, as the sulphur is injurious to flowers. The charring process causes the water to penetrate the stem and to sustain the life of the flower. Chrysanthemums may be kept in good condition for a month or six weeks if treated in this manner. This hint is worth remembering when flowers are scarce and dear.

Mrs. J. A. S., Ohio.

**Strawberry Pudding**

One pint of bread-crumbs, one quart of sweet milk, one cupful of sugar, the grated peel of one lemon, the yolks of four eggs, butter the size of a walnut. Drop this into a buttered baking-pan and, when baked, cover the top of pudding with fresh strawberries (one quart) and cover all with the beaten whites of four eggs, with one cupful of granulated sugar added; return to the oven and leave till the froth is slightly browned. Serve cold with cream. Canned strawberries may be used the same way, but do not add so much sugar to the filling. This pudding is delicious.

Mrs. P. M. N., Indiana.

**Snowballs**

Beat until light one-half cupful of butter or lard, two cupfuls of sugar and two eggs. Then add a pinch of salt, flavoring, two cupfuls of buttermilk, a teaspoonful of baking-powder, a scant level teaspoonful of soda and flour enough to make a moderately stiff batter. Add the baking-powder and soda to the flour before sifting, and sift three or four times. Bake in small gem-pans. When done, insert a fork in the bottom of each and dip them into a boiled icing while still warm.

Mrs. J. L. R., Ohio.

**A Few Household Helps**

To amuse children on a tiresome journey, provide a small, firm cushion and a paper of pins, and let them stick the pins in the cushion to form many different designs, faces, etc. The designs could be outlined with crayon, as it brushes off quite easily, leaving the cushion clean for a new one.

Mrs. E. E. Y., Utah.

In hemming table-linen or bleached muslin, try rubbing the seam with dry white soap. The needle will go through much easier.

C. S., Ohio.

Instead of pouring kerosene on a clock when it will not run, saturate a piece of flannel with the kerosene and place in the clock. Leave there until oil is all evaporated.

A Reader, Iowa.

When washing gored skirts, always hang garment by the band, using two or three pins to fasten it to the line. If pinned this way, the skirt is less likely to sag.

Miss B. F., Kansas.

When making jelly and juice refuses to "jell," add to every pint and a half of juice two tablespoonfuls of good vinegar, and you will have no further trouble.

Mrs. A. W., Texas.

**Club Toast**

A substantial dish for breakfast or luncheon is made by placing on each individual plate a slice of dry toast. On this place a slice of broiled ham, and on the ham a poached egg. Over all pour a sauce made by bringing one cupful of cream to the scalding-point and stirring into it a tablespoonful of butter and half as much flour blended; season with salt and a dash of white pepper. A truly French idea is to use sour cream instead of sweet, and many consider it most delicious.

A. M. A., New York.

**To Prevent Comforts Becoming Soiled**

The end of the comfort nearest the head generally soils first. So, to protect it, I cover the edge with muslin, although calico or gingham will do just as well. Take a piece of material fourteen inches wide, double and fold it over one end of the comfort, so that it will be seven inches on one side and seven inches on the other. Turn in edges neatly, and tack on the comfort, as shown in the illustration. Always keep this end at the head of the bed. When the muslin becomes soiled, it can be taken off, washed and tacked on again.

Mrs. L. M. S., Ohio.

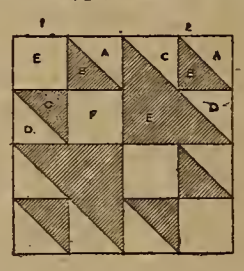
**To Clean a Bread-Mixer**

After dough is taken from mixer, pour in about one-half pint of boiling water. Cover well and let steam for some time. Scrape off dough with knife and wash. The dough comes off easily and does not scratch the mixer.

Mrs. W. P. M., Missouri.

**Hour-Glass Quilt-Patch Block**

I am making a quilt from this pattern and think it is very pretty. Perhaps some of our readers may like it, too. To make it, begin at the first half marked 1, sew a and b together, having a of light and b of dark material. Then take e, which should be light material, and sew to a and b. Do the same with d, c, f, having d and f of light goods and c of dark goods. Sew both parts of No. 1 together, as shown in illustration, and you will have one fourth of your block finished. For part No. 2 sew a and b together, having a of light and b of dark material, then sew on c and d; add e. Sew No. 1 and No. 2 together and you will have half the block. Continue same way for other half.



My blocks, when finished, are fourteen inches square, but they can be made smaller if desired. Of course, the light can be changed for the dark, but if made the way suggested, the quilt will be light around the edge, and you can use all dark stripping when joining them together; but I think this way is so much nicer. This hour-glass design makes a very handsome and attractive pattern for a quilt.

Mrs. J. W., New Jersey.

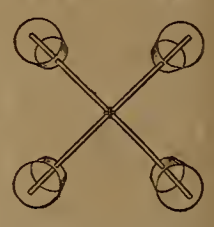
**To Keep Aluminum Bright**

Olive oil is an excellent cleanser for aluminum ware. After washing it, rub with a cloth saturated with olive oil. It will keep the aluminum bright and free from rust.

Mrs. J. S., Ohio.

**To Use the Bottom of a Gas-Oven**

By the use of this simple device the bottom of a gas-oven may be used when the grates are in use, and not scorch the food. Two pieces of heavy wire are crossed and securely bound in the center, with a lighter weight wire. Take four tin cans (I use condensed-milk cans) and in both sides of each can make a hole large enough to allow the wire to pass through, then slip the cans on each of the four wires and bend at the outside edge to fasten securely. This device should be made to fit the oven for which it is intended, leaving space at each corner large enough for a plate to set on the can.



A. L. T., New York.

**Valuable Remedy for Felons**

I consider the following a very valuable remedy for felons: Put a spoonful of green copperas in a cupful of sweet milk, set on the stove until hot and the milk curds, then immerse the felon in the hot milk, as hot as can be borne, and hold it there, keeping the milk hot several minutes. Then bind the curd on the finger. If the felon hasn't gone too far, this will cure it in a very short time.

Mrs. F. H., Missouri.

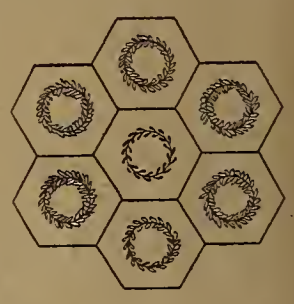
**To Freshen Ham**

When ham has become hard and salty, slice it and place in a pan of buttermilk for a few minutes, then rinse and fry as usual.

Mrs. W. C. S., Oklahoma.

**Attractive Home-Made Rug**

This rug can be made from old trousers or coats. Wash and press the cloth and cut a pattern like the one here illustrated. With a small individual butter-dish mark off a circle in the center of each block and cat-stitch this ring with pink or green yarn, one row pink and the next one green. The second row will require six blocks. Each side of the block is three inches long. Keep on adding as many rounds as you wish the size of the rug. The rug may be lined with old carpet or sacks to make it weighty, so that it will lie flat.



Mrs. M. M., Michigan.

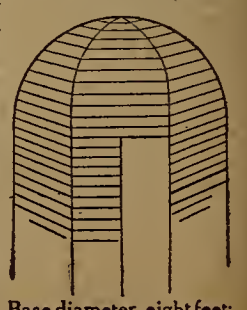
**A Rose Bower**

Would you have a thing of exquisite beauty on your lawn? Plan for it now, and set your climbing roses in their places, and then in one or two years later construct the iron frame. Mark a circle on the ground, eight feet in diameter. On it lay off a hexagon (figure of six equal sides), each side will be four feet. At each of the six corners, and also at one side of where the entrance is to be, drive a stake and leave it there to mark the places for setting the ends of the iron rods of the frame when ready for them. Midway between each two stakes, entrance-way excepted, set a rose-bush. In my own bower, naming them from right to left around the frame are, first, "Madam Peary;" second, "Crimson Rambler;" third, "Empress of China;" fourth, "Chlotilde Soupert;" fifth, "Rose Reuben Rambler;" sixth, "Keystone."

For the frame it will require nine twelve-foot rods of seven-sixteenths-inch round iron. From eight of these rods the blacksmith, by four welds, will make four rods twenty-four feet long, with which to form the arches and the girder. The extra twelve-foot rod to be used in forming one side and the top of the entrance-way. To form the arches, bend the central part of three of the twenty-four-foot rods over the hind wheel of a wagon. Set a four-inch tile in the place of each stake, perpendicularly, so that the top will be an inch or two lower than the surface of the ground, to receive the ends of the arched rods, and also for the rod forming the doorway (see illustration below). Clamp the arches where they cross each other with wire. Use the fourth long rod as a girder, three-and-one-half feet above ground, bending it at each corner and staying it there firmly with wire. Next, fill the tiles around the ends of the rods with concrete. And after the concrete hardens, take Nos. 11 or 12 annealed wire, and, beginning about eighteen or twenty inches above ground, trellis the frame with the wires twelve or fourteen inches apart, stretching, trueing and wrapping the wire a couple of times around each rod. These wires will be needed in training the bushes. The total expense for material and construction should not exceed three dollars. The bushes will require liberal trimming each spring after maturity to keep in good form.

"A thing of beauty is a joy forever." That this fact is fully exemplified in the rose bower, has been the annually recurring verdict with us for the past seven years.

J. R. C., Illinois.



Base diameter, eight feet; height, eight feet; sides, four feet

Editor's Note—Monthly we give prizes of $2.00 for the two best descriptions (with rough sketch) of original home-made household conveniences or labor-saving devices, and $1.00 for the third best or any that can be used. We also give 25 cents each for helpful kitchen hints and suggestions, also good tested recipes that can be used. We would suggest that you do not send more than two recipes, and not more than five kitchen hints each month, because we receive so many that space will not allow us to print them all, in spite of the fact that they are reliable and practical. All copy must be in by the tenth of July, and must be written in ink, on one side of the paper. Manuscripts should not contain more than 250 words. We would suggest that contributors retain duplicate copy, as no manuscripts will be returned. The mail is so heavy that it is impossible for us to acknowledge receipt of manuscripts. Address "The Housewife's Club," care of Farm and Fireside, Springfield, Ohio.

# Summer Clothes for Children

## Practical Patterns That Will Appeal to Every Mother

### Designed by Miss Gould

No. 1529 No. 1341 No. 1532 No. 1277 No. 1757

EVEN if a mother does not always have time to make her own clothes, she wants to make her children's, for she knows that if she does, they will cost less than ready-made garments and they will last longer. The first three designs shown above are for little girls from two to twelve years of age. Although they are all smart and up-to-date in style, they are easy to make and launder and they are practical. They can be made up in a number of different materials such as gingham, chambray, linen and batiste.

FOR the really little boy there is nothing so serviceable and trim-looking as a Russian-blouse or sailor suit. The Russian-blouse suit illustrated above in pattern No. 1277 is a very good little model and one that will appeal to the busy mother, for the blouse unbuttons in front and it can be washed and ironed flat. The second design for a boy is shown in pattern No. 1757. The blouse to this smart-looking sailor suit may also be made to unbutton all the way down the front, so that it can be easily laundered.

### How to Get the Patterns

If you want your children's clothes to be right in style and yet practical, use the famous WOMAN'S HOME COMPANION patterns which we supply at the low price of ten cents each.

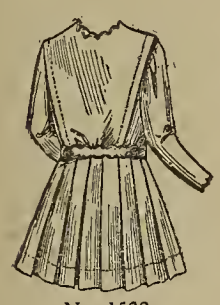
So great has been the demand among FARM AND FIRESIDE readers for our WOMAN'S HOME COMPANION patterns that we have established three offices or depots from which these patterns can be obtained, as follows:

FARM AND FIRESIDE, 381 Fourth Avenue, New York; Springfield, Ohio, or 1538 California Street, Denver, Colorado.

We suggest that you send your order to the depot that is nearest to you to facilitate the quick delivery of the pattern.

### A Premium Offer

To any FARM AND FIRESIDE reader who sends us one new subscription to FARM AND FIRESIDE with fifty cents for the same, we will give as a premium for the subscription one WOMAN'S HOME COMPANION pattern. To obtain a pattern without cost, send the subscription to FARM AND FIRESIDE, Springfield, Ohio.



No. 1532

No. 1529

No. 1531

No. 1341

**No. 1529—Low-Neck One-Piece Dress**

Pattern cut for 2, 4, 6 and 8 year sizes. Quantity of material required for medium size, or 6 years, three yards of twenty-four-inch material, or two yards of thirty-six-inch material. This is an especially practical design for a little girl's dress, as it is very simple to make and very easy to launder. The waist is cut in the prevailing popular kimono style

**No. 1341—Girl's Collarless Dress**

Pattern cut for 6, 8, 10 and 12 year sizes. Quantity of material required for medium size, or 8 years, two-and-seven-eighths yards of thirty-six-inch material, or four-and-one-half yards of twenty-four-inch material, with three eighths of a yard of all-over embroidery for trimming. For a dress-up frock nothing could be more attractive than this design. The waist is cut square neck and has puff sleeves finished with narrow cuffs. The skirt is made with a deep hem topped with two tucks

**No. 1532—Dress with Sleeves in Two Styles**

Pattern cut for 6, 8, 10 and 12 year sizes. Quantity of material required for medium size, or 8 years, four-and-three-fourths yards of twenty-seven-inch material, or three-and-three-fourths yards of thirty-six-inch material. To give this dress an attractive finish, it may be scalloped with mercerized cotton in such colors as red, green, tan or dark blue

**No. 1277—Russian Suit with Sailor Collar**

Pattern cut for 2, 4 and 6 year sizes. Quantity of material required for medium size, or 4 years, four-and-one-half yards of twenty-two-inch material, or three-and-one-eighth yards thirty-six-inch material, with five-eighths yard of contrasting material and one fourth of a yard of white material, such as linen or piqué for the shield

No. 1556

No. 1758

No. 1757

No. 1277

**No. 1757—Russian Suit with Sailor Collar**

Pattern cut for 4, 6 and 8 year sizes. Quantity of material required for medium size, or 6 years, four-and-one-half yards of twenty-seven-inch material, or three-and-one-fourth yards thirty-six-inch material. This is a good model and a particularly smart one to use for a little boy's sailor suit this summer. It is also a very easy style to make

**No. 1556—Girl's Blouse Dress**

Pattern cut for 6, 8, 10 and 12 year sizes. Quantity of material required for medium size, or 8 years, three-and-five-eighths yards of twenty-seven-inch material, or two-and-three-fourths yards of thirty-six-inch material, with three fourths of a yard of contrasting material for trimming. For hot summer days this is a most comfortable dress. To make it very smart, the collar, cuffs and belt should be in a contrasting color or in a darker tone of the same color as the dress

**No 1758—Girl's Middy-Blouse Suit**

Pattern cut for 6, 8, 10 and 12 year sizes. Quantity of material required for medium size, or 8 years, five yards of twenty-seven-inch material, or four yards of thirty-six-inch material, with one-half yard of a contrasting material for the trimming. These middy suits are more in vogue than ever this season and they are loose and comfortable and yet good-looking

**No. 1531—Gathered Dress—High or Low Neck**

Pattern cut for 6, 8, 10 and 12 year sizes. Quantity of material required for medium size, or 8 years, four-and-three-fourths yards of twenty-four-inch material, or three-and-one-fourth yards of thirty-six-inch material, with one fourth of a yard of tucking for yoke and collar if the dress is to be made with high neck

No. 1556 No. 1758 No. 1531

Gingham, chambray and linen are all good materials to use when making children's dresses like the designs shown in patterns Nos. 1556 and 1758. If the material is in a solid color, a smart finish may be given the dresses if the trimmings are of plaid or striped materials. For an afternoon dress pattern No. 1531 is a very good model. A dress of this style may be made of fine white lawn or flowered batiste.

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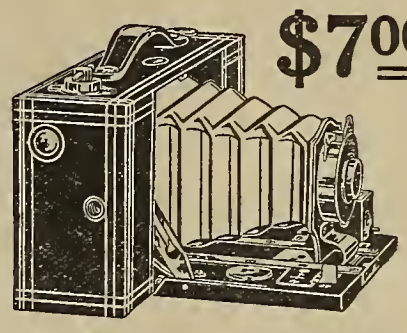

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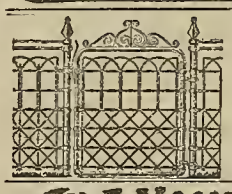

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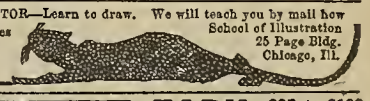

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# Good Work by Our Girls and Boys

## Annie and the Muskrats

By Porterfield O'Neale, Age Twelve

ONCE upon a time there was a little girl named Annie. She had soft, yellow curls, big blue eyes and little bare feet, and wore a brown linen pinafore, and a white bonnet that swung like a basket from her arm. She lived near the seashore and played for hours on the yellow sand with pebbles and shells or waded knee-deep in the water.

One day Annie got tired of playing on the sand; she wanted some pink marsh daisies, so over the hill she ran to the marshland and jumped like a squirrel from tuft to tuft of grass, which was dotted all over the marsh, but covered with water when the tide was in, just showing the tops of the rushes. At last she came to a tuft of grass as large as a round table, on which pink daisies grew. She had often seen them and wanted them, but, until now, had not dared to come out into the marsh this far. Tired from her run over the hill, she threw herself down on the center of the tiny island with her little face in her hands. She listened to the soft rushing of the water, the drowsy humming of the bees, to the song of the birds and watched the soft, fleecy clouds fly over the blue sky. She was just thinking how nice it would be to roll around in one of the nice, soft, white clouds when she heard such a splashing! She turned quickly to see what it could be.

A big hollow log lay half sunken in the water, and muskrats swam through it, over it and around it, dancing and playing tag just like children do. Annie laughed out loud, and it frightened the muskrats so much that they ran and swam into the hollow of the log and would not come out any more that day. She heard the tide coming in, so she filled her bonnet with pink daisies and ran home. After that she came often to see her new friends, the muskrats, and as long as she was quiet they did not mind, but just let her laugh, and they would hide. They were so funny with their queer antics that she often had to stuff her little fist or apron into her mouth to stop laughing.

## Lincoln—My Favorite Hero

By Dorothy Lind, Age Thirteen

(First Prize)

ABRAHAM LINCOLN is my favorite hero. He was born February 12, 1809. In that year other great men were born, among them Edgar Allen Poe, Oliver Wendell Holmes and Gladstone. But there was none greater than Lincoln.

Lincoln acquired his education through constant study and work. So great was his desire to gain knowledge that he often stayed up all night studying the Bible and Shakespeare by the flickering light of the fireplace. His speech at Gettysburg monument is one of the best specimens of literature in the English language.

He was gentle and kind to everyone. He loved children and was greatly grieved when his son died. He sympathized and was sorry for the women who lost their sons and husbands in the war, and never allowed their appeals to go by unheeded. There is no better key-note to his character than his own words, "With malice toward none, with charity toward all."

Once a poor widow, who had befriended him while a boy, appealed to him to help her son, who was indicted for murder. Lincoln offered to be her lawyer. A witness said he had seen the murder by moonlight. Lincoln took an almanac from his pocket and proved that there was no moonlight on the night of the murder. The boy was cleared, and Lincoln afterward proved the witness to be guilty. Lincoln would not take any money from the widow.

At another time, when Lincoln was clerking in a store, he gave a woman an ounce less of tea than she paid for. That evening he walked six miles to give it to her. What great honesty!

Abraham Lincoln died on the fourteenth day of April, 1865. It was just at the close of the Civil War, and the nation's gladness was suddenly changed to sorrow. As one historian expresses it, at his death the negroes lost their emancipator, the North their greatest president, and the South their best friend.

"Lighthouse on Pacific Coast"
Photograph taken by Ruth Ford, age thirteen, Ilwaco, Washington

## Spring

By Mary Adams, Age Fourteen

SPRING has come with its thunder-showers,
The snow has melted and gone,
And now will come the pretty May flowers
Which you find with the breaking of dawn.

The ground is bare and the crocuses peep
From their bed in the deep, deep sod;
The tulips spring from their wintry beds,
From which they are called by God,

The birds come back from the sunny South,
And sing their songs of glee,
And build their nests in the tree-top bough,
Or in some beautiful lea.

The farmers plant their seed-corn then,
And their early potatoes, too,
And are busy plowing their ground, for on
The farm there is something to do.

## My Little Pussy

By Edel Liebe, Age Thirteen

IN THE pleasant summer weather,
Underneath the bright blue sky,
Merrily we play together,
Little Puss and I.

In the winter, cold and dreary,
On the cozy rug we lie;
We are never dull or dreary,
My little Puss and I.

In the springtime's sunny hours,
As the bees go humming by,
Where the fields are gay with flowers,
There we ramble, Puss and I.

When the happy day is closing
And the stars peep through the sky,
On the sofa, snug reposing,
Side by side, are Puss and I.

Four of our enthusiastic club-members. From left to right, Irene Martin, Esther Roslund, Georgiana Keiber, Leta Mae Hopper

## The Thunder-Shower

By Ida Surtees, Age Sixteen

ONCE a dozen merry raindrops
Were floating 'cross the sky,
In a little fairy carriage
That just happened by.

'Twas just a bit of fleecy cloud
Throughout all lined with silver,
And all the raindrops stepped aboard
As it floated o'er the river.

On they sped before the breeze,
Still onward toward the sea,
While other raindrops came aboard
And formed a merry company.

The carriage then grew very dark,
'Twas full to running o'er,
But still the raindrops did not heed
And only came the more.

Hark! a peal of distant thunder
Echoes 'long their route,
When, lo! the carriage burst in two
And the raindrops tumbled out.

Some fell among the thirsty flowers
And raised their drooping heads;
They gave a freshness to their leaves
And cooled their mossy beds.

## Baby

By Mary B. Potts, Age Ten, Peculiar, Missouri

I HAVE a baby brother,
His cheeks are like the rose,
He likes to follow papa
Everywhere he goes.

## Dewdrops

By Nana Randall, Age Eleven

DEWDROPS, dewdrops, dewdrops, sparkling in the morn,
Coming in the nighttime, flowers to adorn;
Hanging lovely teardrops on the pretty grass;
Pure as crystal water shining in a glass.

Dewdrops, dewdrops, dewdrops, tell us who you are;
Are you fairy teardrops, falling from a star;
Do the angels send you for the flowers' sake,
When they are just longing a dainty bath to take?

Dewdrops, dewdrops, dewdrops, children love you, too,
Love to bathe their faces in the morning dew,
Love to see you sparkle on the lawn so sweet,
Love to see the dewy grass waving at their feet.

"In the Woods"
Photographed by Ruth Ford, age thirteen, of Ilwaco, Washington

## Signs of Spring

By Ruth Patrick, Age Fifteen

MUSIC stealing softly to us,
On the gentle southern breeze,
Bringing with it sweetest perfume
From the southern flow'rs and trees.

Wild ducks seeking northern waters,
Blackbirds always on the wing;
And the meadow-lark's clear carol,
All are signs of coming spring.

Listen, close, you'll hear the murmur
Of the green things of the earth,
Plants and trees and grass and bushes
All are waking to new birth.

## April Fairies

By Emma Petersen, Age Sixteen

APRIL fairies, smiling gay,
Beckon me to come and play,
Showing me where daisies grow,
And where gentle breezes blow,
Waking up the frozen brook,
Dancing into shady nook,
Brightening up the world so drear.
Oh! I'm glad that April's here.

## My Favorite Hero

By Stacey Bowman, Age Thirteen

(First Prize)

MY FAVORITE hero is Colonel George Rogers Clark. In the history of the Revolution no braver deed is recorded than the winning of the West from the British by Clark. When the colonists were fighting the British on the coast, Clark received six thousand dollars to capture the French forts in the Ohio and Mississippi Valleys.

Starting with a small number of men, he waded streams and rivers until he came to the French forts, and took them without fighting. Then the next thing to do was to subdue the Indian tribes, who were allies to the British. This was finally accomplished, and the Indians became Clark's friends.

When Hamilton, the British commander at Detroit, heard of Clark's success, he determined to drive him out; so, starting with many men and provisions, he captured Vincennes, where there were just two men. When Clark heard of this, he entered the town and began firing on the fort where the British were stationed, and every time a man appeared at a window, or a port-hole opened, a shot from the rifles of Clark's men found entrance.

At last Hamilton saw it was useless to continue the fight, so he surrendered, and Clark took possession, changing its name to Fort Patrick Henry in honor of the governor of Virginia. The British prisoners were allowed to go back to Detroit, except Hamilton and the officers, who were sent back to Virginia as prisoners.

The two important advantages gained by the capture of this territory were the subduing of the Indians, and the colonists being able to claim the Northwest Territory, with the Mississippi as the western boundary. Colonel Clark spent the last years of his life near Louisville, fighting disease and poverty, and when Virginia presented him with a sword, he broke it in two and said he did not need a sword, but he wanted bread.

## I Wish

By Mildred Isaacson, Age Fourteen

I WISH I had a better heart
And a kinder disposition,
And how I wish that I could write
A better composition.

I wish we didn't have so far
To go to school each morn.
I wish on damp and rainy days
I wouldn't be forlorn.

I wish a hundred other things,
I wish I wouldn't quarrel.
And in the future how I wish
I'd be a better girl.

## School is Over

By Grace Thompson, Age Eleven

LESSONS and studies are over,
And our books are all laid aside.
Now's the time when it's fun to go fishing,
Or saddle "old Dick" for a ride.

Then out in the country at grandma's
We spend the sweet summer hours,
We roam through the meadows and pastures,
And gather such beautiful flowers.

## Special Notice

ALL work entered in this month's contest must be endorsed by parent, guardian or teacher to show that it is your very own. Write on one side of paper only, with name, age and address at top. If you join the club the same time you enter contest, write your name and address on a separate sheet of paper.

## Our Bulletin Board

The prize contest this month is particularly interesting, and some very special prizes will be awarded. Write a verse on one of the following subjects and try for a prize.

PRIZES: To the three lucky girls under seventeen who send me the best verses on any of these subjects, "The Hay-Stack," "The Swimming-Hole," "The Old Swing" or "Vacation Days," I will send a charming sterling-silver cross pendant heavily enameled.

The pendant is just about the prettiest little bit of jewelry that I've ever seen, and you will be delighted with it, girls.

To the three fortunate boys who send me the best verses on any of the above subjects, I will give a fine stag-handle jack-knife—just the kind of knife that every boy wants and should have in his pocket. Try for them, boys.

For the next best five verses in order of merit, I shall award splendid books of travel and adventure. Contest closes June 30.

I want this to be the most successful contest we have ever had. So pitch in and win.

Send your letter to Cousin Sally, Farm and Fireside, 381 4th Avenue, New York.

The Cousin Sally Club buttons are going out by the hundreds. Have you sent for yours? It costs only five cents, you know. See picture of our club pin at top of page.

There were nearly two thousand stories entered in the April 10th contest. The prize-winners will be announced in our next Bulletin Board.

Two of the photographs on this page were sent in by a club-member in far-off Washington. Ruth lives just a mile from the coast.

Several of our boys are busy making rose bowers. There is a good suggestion for one on page 16. Get your father to help you with it.

Lowry Baynes, of the Busy Bee Club at Salem, Indiana, reports that their branch club is very successful. At present they are busy making handkerchiefs for their handkerchief sale. A good idea.

Alma Bowden, age ten, Burgaw, North Carolina, would like to exchange post-cards with readers.

Flora Maybell Kellogg, age thirteen, Savannah, Missouri, is making a collection of post-cards showing capitol buildings of every state. Don't some of you want to help Flora complete her set?

Emma Corbet, of Nebraska, is keeping all of our pages and tying them together with ribbon. A much better way is to bind them with a hair-pin.

Oda Beardsley, of Canfield, Ohio, writes that this spring the scholars in her school planted sixteen rose-bushes, one lilac-bush, six trees and one golden-glow plant on the playgrounds.

"In the Orchard"
Taken by Frank Cedoz, with camera we awarded him in a contest

# SUNDAY READING

## The Refiner and the Furnace

### By Pearl Howard Campbell

But He knoweth the way that I take; when He hath tried me, I shall come forth as gold."

The simile of the furnace and the process by which precious metals are refined and purified was ever a favorite one with the prophets of the Old Testament. "Behold, I have refined thee, but not for silver; I have chosen thee in the furnace of affliction," says Isaiah, and Malachi, with his seer's face turned toward the future, has a vision of the day when Christ "shall sit as a refiner and purifier of silver; and He shall purify the sons of Levi, and purge them as gold and silver, that they may offer unto the Lord an offering in righteousness."

Yet none of them touch our hearts as does this plaintive cry of Job's, wrung from him in his deepest misery: "Oh that I knew where I might find Him!" "I cannot see where He doth work," he cries bitterly, "He hideth Himself on the right hand, that I cannot see Him."

And then, with that beautiful trust in God which the loss of wealth, friends and family cannot destroy, his soul mounts upward in a pæan of thanksgiving. "But He knoweth the way that I take; when He hath tried me, I shall come forth as gold."

Those who are familiar with life in the cities of the East perchance remember of one day straying down the narrow street of the silversmiths, where many a dusky figure crouched beside his tiny, portable refining-pot. From time to time a bit of fuel is added to the fire, while the refiner watches, testing and waiting until the dross is consumed, and in the clear, molten metal he sees his face. This was the picture, beyond a doubt, which flashed before the mind of Job.

So God tests us to-day, patiently waiting until the baser part of our natures, the dross of selfishness, hatred, impurity and faithlessness is burned away, and in the mirror of our souls He sees His face. It is a beautiful thought once we become used to it, this idea that we are continually being tested by Him "whose service is perfect freedom." Someone has called temptation the raw material out of which character is made.

Believing this, the world-old problem of why God permits the existence of evil becomes an exceedingly easy one to solve. It is because this world is a training-field for a higher life, and only by knowing evil and choosing good continually can one develop a perfect character. It is not necessary that we understand exactly by what means sin entered the world. It is sufficient if we recognize its presence here and do all in our power to uproot it.

Sometimes, when we grow a little morbid and self-centered, we fancy that the temptations which we have daily to face are peculiarly our own. "No one else has such a bad temper as I, or such a proud spirit. Other people are not confronted with so many doubts," we say, and, thinking this, we do not try quite so hard to drive the enemy forth from our souls.

Yet all alone in the wilderness which lies beyond Jordan our Lord struggled with these same forces which beset us. "He had taken his armor not for idleness, but for battle, says St. Chrysostom. Then the angels came and ministered to Him, and the powers of evil left Him, for a season. It should make the battles which we wage for mastery over ourselves infinitely easier to remember that our great Elder Brother was "in all points tempted like as we are," and for that very reason is the better able to succor us when we are tempted.

We are sometimes inclined to murmur against our surroundings. The people around us are so unsympathetic. The tasks that fill our hands from day to day are not to our liking. We could do so much better work for Christ if we were only situated differently. Teach half a dozen children the rudiments of the Christian faith? The work is too insignificant a task. Give us a labor worthy of our ability, we cry. Do we realize that God has placed us where we are, to find out what sort of metal we are?

The Psalmist sings of those who, going through the Vale of Misery, use it for a well. The humblest life may become a very glorious one, if it will but expand in the sunlight of faith and love. "The flower by the roadside blooms a thing of beauty; perhaps it has just as hard a time as any of us getting along there in the dust and dirt where the soil is poor, the rocks are bare and the moisture scant."

God never places us in a hard situation and leaves us all alone. Dreary as the outlook may be, uncongenial as the people around us, His Holy Spirit is ever near. Before we call, He is ready to answer. We must realize, too, that a great part of the strength of life depends upon the degree with which we get into harmony with our environment. So long as we are at war with our church, our vicinity, or our relations, so long will much of the forces of our lives be worse than wasted.

We have only to turn the pages of our Bibles to become convinced that surroundings amid which Christ labored were far from congenial. True, there is a never-fading charm about that humble home at Nazareth, with its homely fare and its daily toil. Yet those who lived closest to Him utterly failed to understand His mission. His brethren thought He must be beside Himself. Even His mother, with the wonderful story of His birth treasured in her heart, sometimes failed to realize who and what He was. Consider, too, the utter loneliness of His ministry, without anyone who could sympathize; the constant disappointment when men turn away and will not drink of the living water which He offers so freely. Out of this test, He comes forth as gold.. Only with Him, unlike ourselves, there was no dross to be consumed.

## What's the Use?—By L. D. Stearns

What's the use of looking at things through dark glasses when we can, as well, see them as God and Nature meant us to? What's the use of grumbling, when it never helps? Yesterday a friend came to see me, and, before leaving, I had almost come to feel I was really to blame for the weather just at the present time prevailing.

I had been too busy to give much thought as to whether it was extremely hot or not, when she arrived on the scene. She looked very uncomfortable. Her face was flushed and perspiring; so was mine before she had been with me fifteen minutes, and I thought more about the heat in that length of time than I'd done before all day.

I'm wondering this morning how much of a *"New Thoughter"* I am. It is certainly beyond doubt that one's moods and emotions affect the body very decidedly, and that little incident seemed a telling illustration of the fact. The day before, being a holiday, I had plenty of time to think about the heat, and as a result was nearly prostrated by it. *That* morning I made up my mind I was simply going to *accept* it, and, dressing as coolly as possible, I went out for an early walk while the birds were having their morning jubilee, and I had been comfortable all day until my friend arrived on the scene.

There's nothing like morning air, and the morning song of the birds, to my way of thinking, to help one to discard the dark glasses and look straight up through God's glorious clearness until we seem, somehow, to catch a faint glimmer of the wonderful plan of life. I seem never so close to the real truth of things, never so almost *one* with the throbbing heart of life as it cries in the voice of Nature, as when I'm up just as the day is being born anew, creeping dim and hazy at first from the great, quiet, enfolding heart of night. It seems at times that one could reach out and touch the hand of God, heaven and earth seem in such close accord.

Every day, if we'll but train our eyes to see it, and our ears to hear, is all alive with glories just its own.

We can't have sunshine and rain at the same time, so why not make the best of whichever one happens to come?

There are all kinds of music in the drop, drop, of the rain. When summer comes, it's part of the eternal plan that we shall have lots of heat. But the mornings and the evenings are wonderful.

So whichever it be—the heat of summer or the blustering cold of winter—and wherever life has chanced to place us, let's pass lightly by the blots that seem to mar, and look, instead, for the charms. They're always there, for all God's things are good.


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# Letters From a Country Sister

## The Servants in the House

Dear Martha:

It's queer how folks will jog along in the same old way for months or years without a thought that anything might be done to improve conditions. Then all of a sudden comes an inspiration which, if followed, changes the face of the whole situation. You know how difficult it is for the farmer's wife to get help with her housework. It has never been a bit easier for me than for anyone else, and for years I have managed alone, *somehow*. That last word has been considered, for I don't think it was a profitable or satisfactory way of managing when it cost me my health. But that spell of sickness really brought the inspiration which showed me a way out of the difficulty.

Of late I have been confiding to you some of the secrets of my life, and I am going to tell you this experience, also, for perhaps it may give you a helpful idea.

I did all my work alone until that fall when nerves and everything else seemed to rebel and go on a strike. Up to that time I thought it almost necessary to do everything myself for several reasons, chief of which was that I wanted to save as much as possible while Hiram was buying that last "forty." But when I was ill for six weeks, we were compelled to get someone to look after things. Then trouble began with the household machinery. Apparently there wasn't a wheel or pulley or any single part that ran in time or harmony with any other part. If we got a girl who knew how to cook, then she knew nothing about dusting or bed-making and absolutely refused to have anything to do with the separator or churning. If we found one who understood something about milk and butter, or took an interest in dusting and sweeping, she almost ruined Hiram's digestion with her atrocious cooking. And so affairs went on until I was nearly distracted.

One day, while I sat by my bedroom window and admired the autumn colorings in the timber-lot, a brilliant scheme came to me so forcibly and clearly that it lined itself up in my brain with the precision of a plan already in operation. Why you and I and the rest of our intelligent farmers' wives haven't thought this out before I can't tell. The plan was this: I would take the money which I had been paying out in wages and invest in certain labor-saving devices that would make it possible for me to do my own work, save my health and have peace in the house again. I had been paying my help three dollars a week; her board I figured at two dollars a week more, her laundry I didn't count. But there was easily five dollars a week or two hundred and sixty dollars a year. What couldn't I buy with that amount! It fairly made my brain whirl to think of it!

When I was able to grasp the situation, I took paper and pencil, and began to figure out what I could buy. It did not require much thought to tell what I needed most, because I knew just the part of the housework which most taxed my strength. Winter was approaching, and I thought with a shudder of the difficulty of keeping our house warm. Four or five stoves with their dampers to be regulated several times a day, to say nothing about supplying them with fuel and carrying away ashes, was staggering in itself. The first item in my budget must be a furnace.

Always I have shied at tasks requiring much strength, for that has never been a big asset with me. As I thought of the washing and churning, the sewing-machine and the cream-separator, they looked like a stone wall in front of me which I knew I must get over or go around before I could ever be quite mistress of my work again. So the second item was a gasolene-engine. After that I thought longingly of a washing machine and wringer with motor attachment, and a fireless cooker.

The next two days were pleasantly occupied with writing for price lists and preparing my petition to lay before Hiram. When completed my budget read like this:

| | |
|---|---|
| Hot-air furnace, installed | $150.00 |
| Washing-machine and wringer | 20.00 |
| One-horsepower gasolene-engine | 40.00 |
| Mangle | 40.00 |
| Fireless cooker | 8.00 |
| Total | $258.00 |

It included all the articles I most coveted and gave a total of two dollars less than the amount of one year's wages for very incompetent help.

Hiram's eyes were bulging when I finished my speech and he had seen my neatly written budget. It was a surprise to him that we had been paying out so much money for such poor service. Because we had been spending that amount, and apparently would keep on doing so, he was more willing than he otherwise might have been to allow me two hundred and sixty dollars for this new equipment. Then, too, my long illness had mellowed him a little and opened his eyes to some of the things which might have prevented it.

"I can't spare all that money in a lump, Susan," he said; "but I'll borrow it for you and gladly pay interest on it, too, for the sake of having the house peaceful like it used to be."

Well, I sent in my orders as soon as I could, and it was only a short time until my "helpers" arrived and had assumed important positions in the house.

First, I must tell you about my maid-of-all-work, the trig little gasolene-engine. If I could never have another new thing as long as I live, I would never regret the cost of this wonderful little machine. It more than paid for itself the first month, just by saving time and strength for me. I wish you could know the ease and satisfaction it has brought to me. Do get one yourself, for I feel selfish enjoying so much rest when so many of my farm sisters are just as much in need of this helper as I was.

It takes but a minute to attach this sturdy little engine to the cream-separator, then to the churn or the washing-machine and wringer, and later to the mangle or sewing-machine. And while it works I simply direct the operation. The horrors of "Blue Monday" have been banished forever from my home. All that is necessary is to arrange the washing, have hot suds in the machine, put in the articles to be washed, connect the engine with the machine, turn on the power and, presto, the work is done. No more rubbing. Then the engine easily transfers its power to the wringer and that work is done for me. I simply assist by putting the articles into the rollers and shaking them out. The machine and wringer are made with motor attachments, and so is the mangle. That handy device is itself worth many dollars to the farmer's wife, for all kinds of towels, sheets, pillow-slips and other flat pieces can be put through it and ironed so much better than one can do it by hand. Then think of the saving of time, strength and fuel, and of the entire make-up of the woman who has the ironing to do!

I tell you, Martha, life is too short and too sweet and means so much more than just living that we should not try to do without these things. Can't afford them! What nonsense! You would afford a girl if you could get one, wouldn't you? Well, these mechanical helps are cheaper in the end because their first cost is practically the last, and wages—why, they just go on from year to year, and you are left with nothing to show for your money.

In my next letter, Martha, I'll tell you of my clever little fireless cooker. Oh, life is pleasant and easy now when I have such a retinue of competent and dependable servants in the house.

Your Country Sister

# Pa's Second Wife

[continued from page 14]

Mandy's face was pale and anxious as, in compliance with her request, the baby was placed in her arms.

"He looks real sick, I think! Breathes queer, don't you notice it? Sort o' choked up an' swallers as though it was hard work. Oh"—her eyes widening with sudden horror as a thought came like the thrust of a knife—"oh, *do* you s'pose it's—it's *diphtheria?* They say it's down at *'The Corners;'* the Rogers family has it."

Before night came it really seemed as though the dread scourge had made its way up from *"The Corners"* to the pleasant farm-house, and the hearts of the young parents grew heavy with fear.

It was impossible to get a doctor. One was ill with pneumonia and the other doctor was out of town. Silas was unable to obtain any help, and he returned home in low spirits.

"We got to depend on our own resources for a few hours, Mandy," he said. "You tell me what you think I ought to do for the baby, an' I'll do my best."

"But diphtheria, Silas! I don't know what to do for that," Mrs. Hooper sobbed.

"S'pose I burn some sulphur. I remember hearing Jim Johnson, the blacksmith, say that was good."

This Mr. Hooper did, nearly asphyxiating his family.

Then the hapless couple tried to read up on the terrible disease. His mother's old doctor-book was brought from the attic. No diphtheria was in it.

Meanwhile the night settled down—a dreary, drizzling, autumnal night with a wind that shrieked and moaned.

And little Si grew worse. His fever ran high, his breathing was distressing to hear.

Mrs. Hooper lay, white-faced, with wide eyes staring helplessly as her husband walked the floor, carrying the moaning child in his arms.

Suddenly his wife, in spite of her lamed shoulder, sat upright and pushed back her streaming hair.

"Silas! I heard a noise out in the kitchen. Let me hold the baby while you go and shut—" She paused abruptly, for just then the door leading from the kitchen was opened gently and in came a fat, little, old woman with apple-red cheeks and shining eyes.

Without a word she took off her gray bonnet and big shawl. Then she turned to young Mr. Hooper and, holding out her arms, said briskly, "Let *me* take that little feller, and do you go out into the other room an' get the basket your pa's brought; it's got goose-ile, cotton battin', ipecac an' some lobelia in it. Humph!"—placing her rosy cheek down close to the baby's chest—"it's jest as I thought. *Croup*—but it ain't so bad. I've tackled worse cases an' come out ahead." Before the half-dazed young man could obey her commands, Mr. Hooper, the elder, entered the room, the basket in his hands and suppressed excitement in his manner.

"Good-evenin', Silas—good-evenin', Mandy," he said timidly. "We heard the little feller was sick, an' Mis' Wig—my wife—she was possessed to come right over an' help ye. I thought I'd come, too, an'—an'—"

"We're glad you *both* came," the younger Hoopers exclaimed in joyful unison, while Mandy added with a sigh of relief, "I declare! I believe that child looks better since—since *ma's* come!"

"Sure!" said the elder Mrs. Hooper composedly. "And now fur the goose-ile, Silas, an' them other things."

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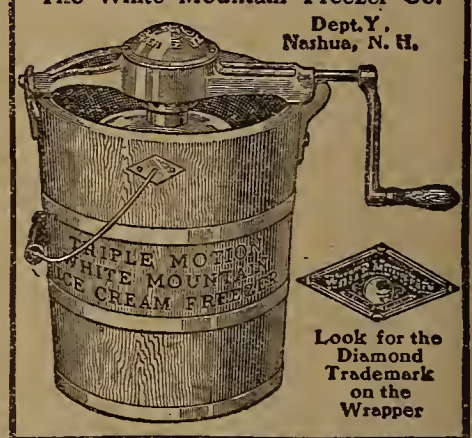


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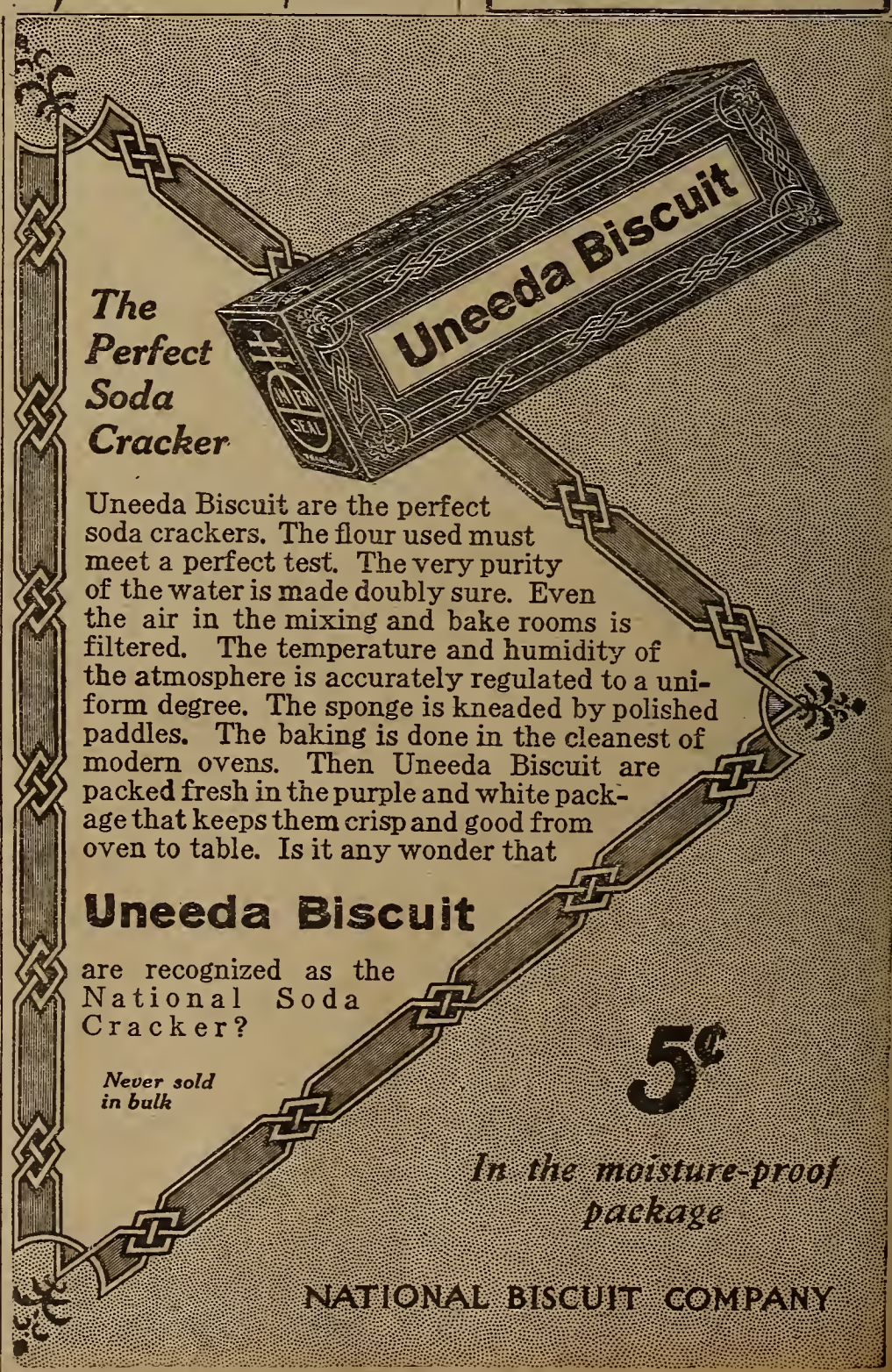


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# Farm and Fireside

## The National Farm Paper

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Homeseeking in the Great Southwest—Page Five

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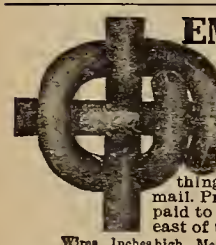

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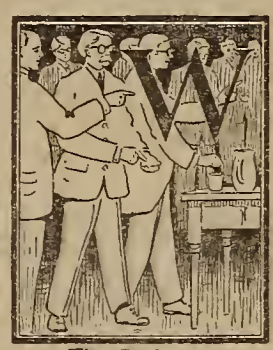

The Professors

The Breeders

WHAT'S the news? Will Irwin has been trying to tell us in *Collier's;* every editor of a newspaper has his own idea of it; the sewing circles claim to know, and the crowd of men about the public square of a Saturday afternoon seem to have unsuspected abilities in the matter of newsmongering—but still the definition is lacking. None of us know just what is meant by the word "news." If my notion had been the prevailing one, the newsboys of Madison, Wisconsin, some weeks ago, would have rushed about the street, yelling, "Extra! Extra! All about the dual-purpose cow!" And some Guernsey or Jersey or Holstein fanatic would have stopped and grunted, in the words of the Irishman who saw for the first time a two-humped camel, "Heck! There ain't no such animal!"

BUT no sensation was created in the public mind, though a goodly array of breeders of Red Polled cattle had an all-day's battle with a detachment of college professors at the agricultural college that day. I wouldn't have missed for anything the sight of the embattled farmers face to face with the professors, and fighting tooth and nail for the recognition of the dual-purpose cow in the work of the college. You see what the college does in Wisconsin, amounts to something. What the college says, in large measure, goes. And when, a few years ago, the animal husbandry department, with reference to the dual-purpose cow, said, "Heck! There ain't no such animal!"—only, of course, it was said in elegant professorese—the breeders of Red Polls were sore.

Dean Russell had, I think, sent for the breeders to hear what they had to say for their delusion. We all sat about as if for a recitation. Then Professor Cole, who knows more about Mendel's Law of Heredity than ever Mendel knew, gave one of the best lectures I ever heard on the laws of breeding, and the impossibility of establishing two contrary qualities in the same individual. It looked reasonable. An animal can't be both black and white—that's plain. And if one of its parents is white and the other black, the progeny must be one or the other—it can't be both. So, if it decides to be white, the black becomes a suppressed characteristic, or a "recessive," and the white is "dominant"—but both are there, all the same.

NOW, Professor Cole didn't claim that milking qualities and beef qualities are mutually exclusive, like black and white, and that a "critter" can't be both; but he dwelt on the fact that the milking type and the beef type are practically "contraries." His lecture was to the broad general effect that if you do get milking qualities in a beefy animal, it is rather an accident, and that the combination is difficult if not impossible to hold together as a breeding proposition.

And then Professor Humphrey came to the scratch. I am using a fighting term advisedly, because Humphrey had a fight on his hands—a good-natured one in the main, but a fight. It was he who had thrown the Red Polls out of the college. For the college once believed in the dual-purpose cow, and had Red Polls in its barns—or, at least, it had a couple of grades, and two or three pure-breds; and when the professor had become convinced that the dual-purpose cow was a delusion and a snare, he threw out the duallers, and went into special-purpose cattle—milk breeds for milk, and beef breeds for beef, and nothing betwixt and between.

HIS talk was a justification of his action. And when he began, the embattled farmers went after him. They said that he had never given the Red Polls a fair chance. He insisted that while the experiment had not been a full one, it had been unsatisfactory on account of the inherent weakness of the dual-purpose position. The embattled farmers said this was all right, except that it wasn't so. Their breed, they insisted, is pure, and they told how many scores of years it has existed without an out-cross. They admitted that some of their cattle went beefy, but they pointed out that the Guernseys and Holsteins do, too, sometimes.

"You can't maintain a dual-purpose breed," said Professor Humphrey.

"We can," said the Red Pollers, "and do."

"It can't be done," said the professor. "And if it can, you haven't done it. The Red Polls don't breed true to good dual-purpose standards." Mr. McKerrow, the State Superintendent of Farmers' Institutes, entered the fray about this time, and told of the success of the English Short Horn breeders in maintaining a breed that furnishes ninety-five per cent. of the milk for the London market, and at the same time furnishes good beef. This didn't make it any easier for the professor. He insisted that such cows are dairy cows. McKerrow and the farmers insisted that they were dairy cows at the pail, but that their steers, and themselves, too, were beef cattle on the block.

"What will those cows do in the dairy?" was asked of Mr. McKerrow.

"Three hundred pounds of butter-fat a year," said he, "for good individuals."

"And how good beef cattle are those same cows and their steers, at the block?"

"Medium to good," said Mr. McKerrow.

AND this was the really significant thing of the meeting. It is, no doubt, harder to breed cows up in two lines than in one only. It takes more breeding skill to preserve the double standard than either of the standards singly. But the English Short Horn breeders do find it possible to keep cows in the "medium to good" class as beeves, and in the three-hundred-pound class as to milk. And most of us are breeding cattle that are poorer than that in both respects. The evidence affected my mind to the admission of the claims for a legitimate field for the milking Short Horns, and some of the other breeds which furnish profits in milk and good returns in beef.

I won't call them "dual-purpose" for the reason that I don't want a fight—and that word seemed the main cause of contention as the shades of evening fell on that hard-fought field. On the main question, both sides seemed pretty well agreed—but that word was a red rag to a bull to the last. Words as provocations outlast ideas.

Herbert Quick

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Vol. XXXIV. No. 18 Springfield, Ohio, June 25, 1911 PUBLISHED SEMI-MONTHLY

"Blow your own horn" when driving your automobile. The law requires it.

Plant a few hills of sweet corn every ten days up to the latter part of June and the first of July, and you can enjoy delicious roasting-ears till frost.

If we would keep our harness adjusted as our horses fall off or gain in flesh, we should see fewer sore necks and shoulders, less balking of horses, and more durable harness.

If you plod away in the fields till sundown, you are pretty sure to skimp the job of milking when you come to the house, thereby lowering your dairy profits and encouraging a lighter flow of milk.

## The Packers and the Law

NO ONE should blame the indicted packers, Louis F. Swift, Edward F. Swift, Charles H. Swift, Edward Tilden, J. Ogden Armour, Arthur Meeker, Edward Morris, Francis A. Fowler, Thomas J. Connors and Louis H. Heyman, for making the fight they have made in Judge Carpenter's court, in Chicago. For it is a fight for freedom from prison, and they have a right to all the delays and evasions of trial that the law allows. But there can be no doubt that the decision of Judge Carpenter sustaining the Sherman law and sending the men to trial will do the country good. During a part of these eight years of delays in the litigation of the government with the packers, John Deitz, "the outlaw of Cameron Dam," has been in open resistance to the law in the woods of Wisconsin. But Deitz, whose case was greatly prolonged considering his circumstances, had been brought to trial on the day Judge Carpenter rendered his decision, and the next day received his verdict of a jury.

Common people, when indicted, usually go to trial. Uncommon people should do the same. What is sauce for a Deitz is sauce for a packer.

These gentlemen of the National Packing Company will now be tried, no doubt. Juries will pass on their cases. This is proper. It is to be hoped that they may have what the old law cases call "a good deliverance"—that is, that they may appear not guilty. That is always to be hoped—that it may be shown that no crime has been committed.

Their offense, if they are guilty, is one in which farmers have a keen interest. It is charged that through their connection with the National Packing Company they have conspired to fix the prices of live stock, as well as of meats. On the whole, the modern packing-house is the most economical tool for turning animals into meat that the world has seen. We could not afford to go back to the old ways even to gain freedom from the evils charged in these indictments.

But this does not carry the conclusion that the men controlling this beneficent agency are to be allowed to do as they please with it. The benefit of great inventions and improvements are on the whole the property of the world, not of the inventors.

## An Outlet for Our Fruit

THE news comes from Tsingtsu, China, that American fruits, both fresh and dried, are featured in the large stores of that Asiatic city. If the immense populations of Asia could be made customers for American fruit at prices representing profits to American orchardists, the fruit business would be greatly benefited. Apples of not the first quality sold in Tsingtsu at $2.93 (gold) per box of forty-six pounds.

The probabilities are, however, that the masses of Asiatics are either too frugal or too poor, or both, to buy much of our fruit at prices which we can afford to take after paying freight and charges for handling.

## City and County Superintendents

IN MOST states, the county superintendents are elected by popular vote, and must live in the county served. But city superintendents are appointed by city school boards, and are brought from outside the city in most cases, for the simple reason that the good superintendent is a specialist not ordinarily to be found locally.

If the city superintendents were elected by popular vote in political campaigns, what sort of schools would the cities have? Probably about such schools as most country districts are obliged to put up with. If the appointment plan is good in the city, let's have it in the country.

Every few weeks we hear of some lad in his teens being killed or crippled by machinery, a runaway or some other farm accident. Boys are notoriously careless and short-sighted. So it pays for the older folks to examine the team, wagon or machinery before the boys start out with them. Don't be fussy about it. That makes a mollycoddle of the boy. Just be watchful.

## Scenery and Farming

THIS is the country scene which appeals to the artist. It is full of quiet beauty. There is much good in it, too, from the farmer's viewpoint.

The worm fence might well be replaced by one of woven wire, even at the expense of that "rusticity" which is so picturesque. But the narrow macadam road is worth more to the farm than the woven wire fence would be. The pasture is evidently not in prime condition; but the sheep, a flock of which should be on almost every farm, not only attract the artist's eye, but are evidences of good farm methods. And the shade and greenery are factors in making the farm a place which the boys and girls will not be likely to leave.

The farmer who dodges around with his horses, trying to avoid meeting automobiles, is unwise, for the time has come when an animal that fears motor-cars will be cut in price on the market.

Begin the fight against rats early in the season by making every granary, corn-crib and other storage-house absolutely rat-proof, and the battle will have been half won. They will not stay where they cannot eat.

We cannot all be soil experts, but by observing closely the soil conditions of every field while we are cropping and harvesting from it we can determine pretty accurately what each particular field needs in the way of fertilizers; then supply the deficiency before next season's planting-time.

The land-boosters notwithstanding, Utopia is still a myth.

Don't balk; if you are determined not to pull, get on the load; it will be easier for the rest of the team.

If you cannot keep flies away from food, keep the food away from the flies. Fence them out with screens, and feed them poison outside of the fence.

The folks who thought the Rain Song of April 10th rather too appreciative of aërial dampness were sorry they spoke, when it refused to rain in May. Moral: surface cultivation and the dust mulch—and an irrigated garden if it can be arranged.

## The Farmers' Union and Barrett

THE president of the Farmers' Union is out with a circular in which he modestly suggests that the time has now arrived when every farmer should join that organization. And he gives as reasons for this suggestion that the Union, having survived the experimental stage, has a record of accomplishment that entitles it to confidence.

He states that the Union has established 1,628 warehouses, mostly for cotton; large numbers of grain elevators and terminals, 245 packing-houses, dozens of newspapers, banks, flour-mills, creameries, pickle factories, stores, implement factories, phosphate plants, phosphate mines, tobacco warehouses and factories, produce exchanges, fertilizer factories, peanut warehouses and recleaners, cotton-grading schools, coöperative life and fire insurance companies, and the like.

Well, they may all join Mr. Barrett's organization, if they desire, and take our blessing. We think every farmer should join some farmers' organization—and more than one if they are handy. The Grange, the Society of Equity and the local coöperative associations and social clubs are all good. The Union, says Mr. Barrett, expects now to devote itself even more definitely to the business end of farming—getting the proper share of the consumer's dollar. No better program could be offered. And there is to say about the Union—it has a president who is using true publicity methods to get publicity. President Barrett is a live wire.

## Cheap and Good—Cheese

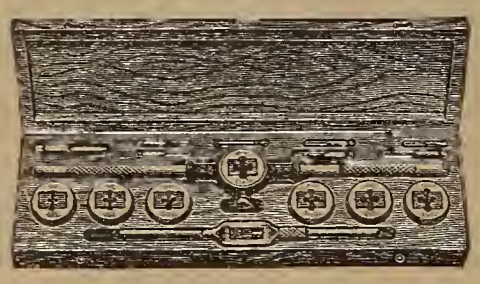
DAIRY Expert C. F. Doane of the Department of Agriculture has, in coöperation with the experiment station of Wesleyan University, made a great many experiments to find out the real facts as to the digestibility of cheese and its value as a food. The conclusions are all in favor of the cheese. It is more freely and completely digestible than bread. It does not cause constipation. It is equally digestible whether "old" or "new." Skim-milk cheese is as digestible as any, and made up to please the taste ought to become a general agent in cutting down the cost of living and raising the profits of the dairy. Cottage cheese is as digestible as the rest and is of as much food value. Fresh beef has only half the food value of cheese, pound for pound. A pound of cheese is worth as much for food as a pound of ham, is more digestible, and is as good as two pounds of eggs or three of fish. And the cheaper grades of cheese are as valuable food as the dearer. Moreover, the American passes by the useful and wholesome cheese through ignorance and blind adherence to custom. Why not buy cheese and sell the eggs—at least when the prices are high for eggs, and the family likes cheese? Study the uses of cheese in cookery, too. And, remember, most cheese gets better with age, for several months, while most foods deteriorate. There's something in the cheese idea, for the market and the table.

# "The Best Tool I Use"

## A Page by Farmers Who Work with the Best Tools and Study the "Know How"

### Stock and Dies

My best tool is a set of stock and dies to cut threads on bolts and nuts of sizes from one fourth up to one inch. I have used my set for seven years and they are in good condition yet. When I buy a new machine of any kind, or a wagon, I thread a number of extra nuts and, wherever it is possible, I put on each bolt an extra nut which, when screwed up tight on to the other, saves many breakdowns and trips to the blacksmith shop. And if you happen to lose a bolt or nut, you can easily make a new one of the right size and keep at work without running any chances of breaking something else. Hardly a week goes by but what some of my neighbors come here to thread

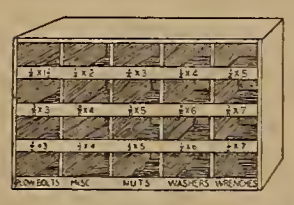


either bolts or nuts, which they have either broken or lost. The dies are adjustable to make the nuts and bolts fit tightly or loosely as desired. John Smith, Colorado.

* * *

I fail to see how a farmer on a well-regulated farmstead can have any "best tool" any more than he could say which one of the five senses was his favorite. One is interdependent on the other in order to perform the many and various tasks on a farm.

A tool which I prize very highly is a set of dies and taps to cut standard threads on bolts ranging from one fourth to three fourths of an inch in diameter. In one end of my shop is a rack fitted with apartments as illustrated.



I buy many of the bolts new and in package lots; others are saved from old machinery carefully taken apart. On stormy days the bolts are sorted, rethreaded and fitted with nuts. New nuts are inexpensive, and I replenish my supply by frequent purchases. Old bolts that accumulate are thrown in a box and overhauled at convenient intervals; if they are beyond repair, they may be used in cement work and for dowels.

Judgment must be exercised in the use of old bolts where there is a severe strain. My outfit has saved me many a trip to the village in a busy season, and I have many times made substantial repairs while the horses were taking their nooning. Fence-wire and barrel-hoops are not in it with bolts, and it is surprising to note how many times in a year recourse will be had to this bolt-rack.

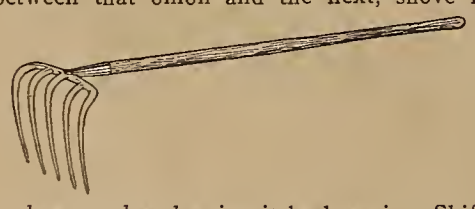
Chas. F. Graff, Michigan.

### The Potato-Hook

To my mind no one ever gets well enough acquainted with any tool to have a real liking for it unless it is what you would call a "hand tool." In some way the handle of the old ax, or the old hoe or the old anything gets to fit the hand in a way that makes one stick to it even when something intrinsically better is to be had in its place.

So it is not at all strange that one should come to have a preference for this or that hand tool. Many a woodsman up here in the Adirondacks thinks more of his ax than he does of—well, say, not his wife, but his dog, for example. There are gray-haired men up here, too, who think so much of the old scythe that it is still used, in spite of advantages of the modern mower. For me the one tool that stands first of all is the potato-hook with five round tines.

It is not that I am any great hand at digging potatoes; it's because the tool is fit for so many uses in raising vegetables, which is my line of agriculture. Of course, the wheel-hoe is the main dependence, but when you have done all you can with it, take the hook, set the outside tine down alongside a thrifty young onion, swing the point in between that onion and the next, shove it



underground and swing it back again. Shift to the other side and repeat. You've not only killed all the weeds the wheel-hoe missed there, but you have completed the dust mulch. With all plants set close in rows it works equally well, and a three-foot sweep with all tines between rows cultivates the soil in a way unsurpassed.

For an onion-weeder, cut off all the tines but the middle one and see how it does the weeding without breaking your back, and how it works as a push-hoe, too.

With the full-sized tool it is as easy to draw the dirt to or from a plant as it is to do it with a hoe. In short, it is an all-round vegetable-cultivator that is lighter and handier than any other similar tool made. Let the man with the hoe try it and see for himself. John R. Spears, New York.

* * *

I submit the merits of a tool which, from the standpoint of cheapness, simplicity and effectiveness, can hardly be surpassed by any tool known to the gardener. This is the potato-hook, which may be made of an old manure-fork with the shank bent into proper shape and fitted into an old hoe-handle.

This tool slips easily through the soil, and if used after every rain as soon as the ground becomes dry enough, it prevents the ground becoming hard, while with it one can quickly form a mulch to retain the moisture, which is as essential to plant growth as the soil itself.

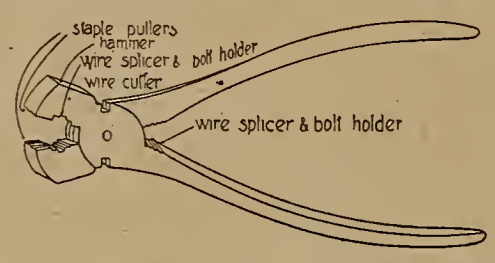
You can get up close to the plants in beds—onions, lettuce and radishes—and if the surface is constantly stirred, the weeds have little chance to get a start.

Robert Bradfield, Ohio.

### Staple-Puller and Wire-Splicer

The best tool I use is a ten-inch staple-puller and wire-splicer. It also drives the staples, cuts wire and holds bolts and rods from turning. I thought the first one I ever saw was about the clumsiest-looking tool ever brought on a farm. But now, after using one for several years, I take more pains to see that it is put in its own place, so that it can be found on short notice, than with any other tool I own.

On this ranch we have nine miles of wire fence to keep up, and with this tool I can take down eighty rods of three-wire fence, tighten wires and replace them in one-half day, using the old staples again, as it removes them without bending, and nearly always at the first pull. Where a fence has been washed out, nothing will beat my staple-puller for getting wire off posts, cutting wire




to make splices, holding wire while splice is being made and putting in the staples with the double hammer of the tool.

The temper in hammer and puller seems to be about perfect. In taking a pump to pieces, this tool will hold the inside rod from turning, while a wrench is used on the couplings. It also makes a good strong plier. All other parts are double, as it has two hammers, two cutters and two rod or wire holders. After years of use, all of these parts are in as good condition as when first brought out of the shop.

Sam L. Goodard, Kansas.

### Penney Plow and Seeder

In this particular part of southern California the soil is light, and, as only shallow plowing is necessary, practically all of it is done with gang-plows. I think this part of our great state was made especially for this plow.

The plow I use is called the Penney plow and takes its name from the man who first manufactured the plow. This is a modern and up-to-date plow and does work that is absolutely satisfactory in every way. It works well and rapidly, and requires a minimum of cost and labor. The Penney plow is usually a four-gang, though five standards are sometimes used. Each standard is equipped with a six-inch reversible share, the plow making a cut of twenty-four inches. Frame of plow is triangular in shape; the standards being bolted to a four-by-six wood beam; the other timbers are four-by-four. The plow is carried on three wheels. The left fore wheel is pivot-style and, of course, in turning the corners of a land, you always turn to the left.

On front of plow-frame is attached a seeder-box with an agitator connected by crank to a spoke in right fore wheel. Thus wheat, oats or barley can be sown in any regulated quantity.

A "float," or improvised harrow, may be adjusted just to the rear of the gangs and, consequently, the plowing, seeding and harrowing is efficiently accomplished in but one single operation requiring only two horses. A fifteen-year-old boy can handle the plow readily. This plow can be set to plow any desired depth and will turn under weeds. Five acres are plowed, seeded and harrowed in this way per day. The plow makes uniform furrows, consequently the ground after plowing is smooth and level.

I have never yet seen a plow that would do so much excellent work as rapidly or at as small a cost. A. K. Young, California.

### Six-Tined Manure-Fork

For gardening and nursery purposes, the six-tined manure-fork takes the place of several small tools with me. It should be rather light, quite straight in the handle, with the best of temper. With this tool one can handle all manure, spade the garden, crush lumps, beat and shake all dirt from sods, stones and rubbish, and throw them in a wheelbarrow. All of these operations leave the soil in better condition than any other tool. I use the fork to rake between vegetables, and by being held straight or angling as required, it will catch and pull out more small weeds than a rake.

It is the best tool with which to loosen the soil about young fruit-trees. I use it to prepare hills for squashes. There is no tool that will clean out "witch-grass" roots equal to it. It will pick stones, rubbish, trimmings of raspberry and blackberry vines, will spade turf or dirt.

It's the best tool for lifting plants, shrubs and small trees from the soil. Without it what would we do when gathering fish-bait? As one gets acquainted with its usefulness, he constantly finds more uses and but one fault—it cannot be folded and carried in the pocket.

H. O. Cheney, Massachusetts.

### The Woodman's Favorite

My favorite tool is the ax. I was raised on a farm about one hundred miles from Niagara Falls, and when I was young, the country was largely covered with timber. I was, therefore, trained at a tender age to use the ax. We had to clear every acre of our land before we could plant a hill of potatoes or corn, and we found the ax indispensable. We built our cabins with the ax and cleared a small piece of land for our garden. We then had to fence it with rails cut and split with the ax.

Later, we built good, hewn houses, all done with the ax. I presume both myself and the ax will soon be things of the past, but I live on a farm where there is still some standing timber, and, like the statesman Gladstone, I like to take my ax out and cut down a few trees.

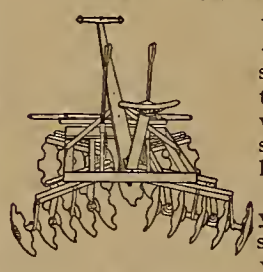
A. McLellan, Washington.

* * *

Of all tools, my favorite is the ax. I know that with an ax and hoe I can go into the wild woods and hue me out a home and live absolutely independent of the entire world. Can I do this with any other tool? No. Not even with the plow.

Leo M. Wathen, Maryland.

### The Cutaway Harrow



No other tool that I have used has so effectively fulfilled the purpose for which it was designed as the cutaway harrow.

For a number of years I lived in southern Florida, where the soil formation is peculiar, being composed of coral rock in various stages if disintegration. The ordinary tools for breaking land could not be used here and, after a good deal of experimenting, we found that the above-mentioned harrow filled the bill. The weight of this machine is about seven hundred and fifty pounds. It requires three good mules to pull it and in some cases we use four.

Without seeing it, one would hardly believe what execution it did to this rock land. On one piece of heavy pine-land soil which was exceptionally rocky and covered with woods-grass we ran the harrow twice, overlapping half each time, making it equivalent to four times over. This thoroughly pulverized the land and we were able to plant tomatoes without other preparation.

The harrow was especially useful on Everglade land. While not rocky like the pine land, this was covered with sawgrass and was very tough. The grass was fired when dry enough to burn and the harrow used several times. The glade land here was a heavy marl, but by the time it had been harrowed thoroughly, it made a fine seed-bed for tomatoes and other vegetables.

One piece of clay soil with crabgrass sod, which is about as tough a proposition as can be found, we went over four times and so thoroughly pulverized the soil that we were enabled to plant tomato-seed in the hill and get a perfect stand. C. R. Ross, Michigan.

### A Girl's Choice

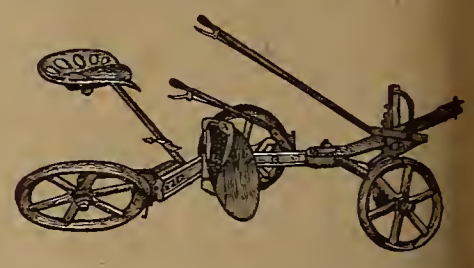
I am a little girl nine years old and live on a farm with my mama and papa. I have pigeons, ducks and turkeys, and if I want papa to make me things for my pigeons or ducks, he tries to make me wait till some other time.

Then I get after mama to make papa do what I want done. Mama always says I use her for a tool. But mama can always get papa to do things, therefore mama is my best tool.

Marylee Siems, Missouri.

### The Disk-Plow

The best tool I use is the disk-plow with harrow attached. The disk-plow breaks the ground more by turning than does a



mold-board plow, consequently the soil is more porous all the way to the bottom of the furrow.

The harrow following every furrow as it is turned, pulverizing the top thoroughly, also levels the plowed ground. I am using with satisfaction two different makes of disk-plows, but think all disk-plows are good. Of course, they operate best on land free from large stones. H. C. Niemann, Illinois.

### The Cream-Separator

Here is a good word for the cream-separator. Let me make it clear that I have no use for the separator with a bowl so constructed that, when removed from the machine, it leaves a trail of milk to stand and sour and stink, laying the foundation for scours in calves and pigs. No matter how good the intentions, that casing will not get scalded often enough to be sanitary.

The separator has opened the way to raise calves without giving them a drop of costly cream after the first week, and only a little from birth. I have sold prime veal, skim-milk raised. What are the profits on this? A seven-week calf fed four per cent. milk will have consumed eight dollars' worth of cream. If it dresses to a value of $12.50, a fair average, the profit is $4.50, not much for our pains.

Now, instead: remove the butter-fat and replace it with two dollars' worth of a good calf feed (there are several); the calf, if properly treated, sells at the same price; the difference between $12.50 and $2.00 is $10.50 profit. But we have sold eight dollars' worth of cream, so our total is $18.50.

Besides working in a dairy, I am a "cream-hauler," and am required to keep the hand-skimmed and the separated cream in different cans. It is not possible to show by illustration the difference between the contents of the various cans, but, nevertheless, the looks and also the smell are, I assure you, often very clearly distinguishable, enough to make the reduction of two cents on hand-skimmed cream, which our creamery is considering.

Leslie L. Haskin, Oregon.

* * *

My best tool is the cream-separator, because it saves me a lot of unnecessary work caused by the old way of straining the milk in crocks or pans, letting it stand for the cream to rise and then skimming the cream (and getting a lot of milk with it, too). With the separator you get nothing but pure cream to churn. You have no pans or crocks to wash. Just run your milk through the separator, flush the machine, take apart, wash well, scald and set out to air. It removes all dirt and hairs from the milk and leaves it clean.

You have good, sweet milk to drink and the calves and pigs get it warm, and the warm sweet milk is so much better for them than sour milk is. After you run one milking through the separator, put your cream to cool, set away what skim-milk you want to use and feed the rest to calves, pigs and chickens, and you have no more bother with it, except churning the cream.

Mrs. W. T. Smith, West Virginia.

* * *

There is nothing about the farm that is of as much benefit as a money-maker and a saver of work as the cream-separator. I think I am fully justified in saying this, for the reason that I have the milk warm for my young pigs and calves after it has gone through the separator and the cream has been taken from it.

Another reason is that butter made from separated cream is worth far more than butter made in the old-fashioned way. We use a separator and are now shipping butter for thirty-two cents a pound. Our cows last year made an average income of ninety-two dollars each. I think the separator is indispensable in getting the best results from the dairy herd. Donald Shepard, New York.

# Our Homeseekers' Excursions

## II.—The Great Southwest—Its Advantages, Drawbacks and Possibilities

### Back to the Ozarks

By A. J. Sellers

Arkansas rice-mill

IN THE spring of 1899, I was afflicted with rheumatism and my family with malaria, so we moved to the Ozark region of Missouri, bought a farm of three hundred and twenty acres of fruit and grass land, improved it, set out five thousand peach-trees, fed cattle for beef and conducted a dairy. We recovered our health, but did not make much in the cattle or dairy business.

In 1907, I was offered three times an acre more than I gave for the place and I sold out. So many were going to Texas along about that time that I got the Texas fever, not the tick fever, but the "Go to Texas fever." We stayed three years in Texas and it was one continuous drouth, which was made worse by the wind and sand storms and bad water. The water is terrible, and altogether we found it a place thoroughly uncongenial for man to live. The two photos at the head of this page are typical farm homes on the plains.

Well, after the first year, we wished we had stayed in the Ozarks. The second year we said we were fools for leaving the Ozarks, and the third year we said we would go back to the Ozarks.

#### Arkansas the Land of Plenty

We made the start back, but thought we ought to stop and try Oklahoma, for many had gone to that state. Everything looked good in Oklahoma until July, when along came the hot winds, just as in Texas, and burned everything to a crisp. Then we said good-by to Oklahoma and pulled out for Benton County, Arkansas, on the southern slope of the Ozarks. When we lived in the Ozarks of Missouri, we heard a great deal about Benton County, Arkansas, being such a good farming country, that it was rich prairie land and free from rock, and about it having more apple-trees than any county in the United States—over six million trees. We had seen a large part of the Ozark country while living in Missouri, but had seen nothing that we could call a rich farming country, or land free from rock.

When we started, we were ashamed to tell people we were going to Arkansas. Now, let me tell you, reader, if you have as bad an opinion of Arkansas as we had, dispel it from your mind, for you are wrong. If there is any land of plenty under the sun, it is right here. Berries, fruits and vegetables of all kinds grow here in abundance and the best land grows seventy-five bushels of corn, seventy bushels of oats and thirty bushels of wheat to the acre in the best years. It is not rocky, except on the brakes and the highlands.

Then the orchards! Orchards everywhere and a most beautiful sight! Just as clean as a garden, with rows as straight as an arrow, and in some places they are in line from one farm to another, so you can look down apple-tree rows just as far as your eyes can carry and see nothing but apple-trees. The country is beautiful; it is the best improved farming country I have seen anywhere, and I have been in the best parts of Illinois, Iowa, Missouri and other states.

In going one mile from town, I counted nine big red barns and saw no machinery out. Big, two-story houses are the rule and some of them are brick. Then, what fine water, no better water anywhere than this! What good is a country if the water is like poison?

#### Settlers Are Satisfied

Nearly everyone owns the farm he lives on, renters are few and not many farms are for sale. Labor is cheap. While looking around for a farm, I met many settlers from other states. Some had been here for many years, some had just moved in, while others had gone away and come back, as we did, but none were dissatisfied.

One old farmer had come from New York State. He said he was well pleased with the country and that the people were truly moral, and could not do enough for a neighbor. These people have not had selfishness forced upon them by hard labor every day in the year, in order to keep the wolf from the door, neither are they mortgage-ridden. I have lived eight years in the Ozarks and my statements are based on personal observation.

Benton County is becoming quite a winter resort for rich Northern people and a summer resort for Southern people. Many are buying winter and summer homes. Wild flowers bloom from March until Christmas; the winters are mild and the summers are delightful.

Long rows of Jonathans in full bloom, in the Arkansas Ozarks

A scene on Roaring River, Missouri

EDITOR'S NOTE—Though in the foregoing letter the comparison between the regions mentioned is based on Mr. Sellers' direct observation, readers are cautioned against forming too hasty conclusions of the states mentioned. Oklahoma is a large state, and Texas is enormous. There is much excellent farming land in Oklahoma, and some parts of Texas have a tropical climate with an annual rainfall of sixty inches.

### Getting a Start in Texas

By F. G. Smith

BETWEEN forty and fifty years ago land could be purchased just outside the city of San Antonio, Austin, Houston or any now large city in Texas for fifty cents an acre. The price at the present time runs from $125 to $450 per acre. About fifty miles from large cities of Texas good land can be purchased at from twenty to fifty dollars per acre, but no farm land can now be bought in Texas for less than five dollars per acre. There is much land advertised in southwestern Texas at so much cash down, and so much per acre per month, but one must be sure that he will be able to pay for it, for, if not, he loses not only the land, but all that has been paid on it. Farming, truck-raising, poultry and the dairy business have to be learned as well as any other calling.

#### The Texas Homestead Law

Anyone inexperienced in farming should have enough money to pay all cash down for the land and then the land is his own, and under the Texas homestead law cannot be taken away from him. The Texas homestead law also exempts from seizure five cows and their calves, two yoke of oxen, one gun, two horses and one wagon, one carriage or buggy, all saddles, bridles and harness necessary for the use of the family, twenty head of hogs and twenty head of sheep, all implements of husbandry and all tools, apparatus and books belonging to any trade, all household and kitchen furniture and all provisions on hand for home consumption. The homestead exempt from forced sale may be two hundred acres or less. There is also exempt from taxation all farm produce in the hands of the producer, and family supplies for home and farm use, household and kitchen furniture to the value of $250, including sewing-machine.

#### The Safest Way To Begin

It is useless for one to tackle the farming business here unless he has enough to pay some portion at least on his land, but he had better pay all. Then if he can't make a success of it, he can work for somebody else until he learns Texas methods.

In the meantime, although his land might be lying idle, it will be increasing in value. I commenced farming in Texas by working on a farm for someone else, then worked on shares, one-half each. The owner of the farm furnished the team, feed and tools. I did the work and furnished my own rations. Next, I worked the land, furnishing my own team, tools and feed, giving the owner of the land one third of the corn and one fourth of the cotton as rent.

When cotton dropped to seven-and-one-half-cents per pound in the lint, I stopped growing it, and went into the dairy business, as I had already a few cows of my own, and continued in the business with great success, at one time having a herd of ninety cows. My success in dairying was due to liberal feeding, while my neighbors expected their cows to live and produce milk on the memory of what they had formerly had.

### Homesteading in New Mexico

By Edw. Jones

MR. GEORGE SAINT-AMOUR'S article, entitled "The Lure of the Far Southwest," in FARM AND FIRESIDE of March 10, 1911, does our country an injustice. I find no fault with the Eastern States, and I am willing to concede to them their possibilities, but New Mexico has possibilities which Mr. Saint-Amour did not mention and some more that he misstated.

Now, I am not a land-boomer, nor am I in any way connected with any of the railroads of the Southwest. I am a farmer. I filed on a homestead in western Roosevelt County in February, 1907, and have made my home here continuously ever since. In 1907 I had a splendid crop of corn, Kafir-corn, milo maize, cane, broom-corn and, in fact, everything we planted. There was an abundance of rain during the growing season. In 1908 I made a fair crop, in 1909 my crop was light, but not a failure by any means. In 1910 I raised plenty of good roughage and some grain.

I am strictly a dry farmer, and depend on the rainfall altogether. It is true that we do not succeed in raising vegetables here every year, but when we do raise them, they are just as fine-flavored as those of any other states I know of, and as for apples, I never ate finer apples than those grown in the Roosevelt-County district. I have never known of alfalfa-hay selling for less than eighteen dollars per ton since I have lived here. As for the winters, the sky is not always clear. We have some cold winds, usually two or three snows during the winter, and sometimes we have very severe blizzards, but they are of short duration. I have never suffered from heat here in the summer. The water in this section varies all the way from very good to very bad, and runs from ten to two hundred and fifty feet deep. There are numerous springs in this part of the country, and I have never known of anybody making a complete failure in getting water. I believe there are plenty of poor men in the East renting homes and working their lives out to make both ends meet who would do much better if they would come to New Mexico and take homesteads, where they can get three hundred and twenty acres, raise a few cattle, keep some poultry and a few pigs or a small bunch of sheep, and make a better living with less work and worry than they do where they are. But one must adapt himself to his new surroundings.

EDITOR'S NOTE—Mr. George Saint-Amour's article in our issue of March 10, 1911, has called forth some protests from residents of New Mexico and western Texas. They say that Mr. Saint-Amour evidently "wrote at long range." This is not true. He wrote after having lived for five years or more in the region of which he spoke.

The above letter from one who has found success in a homesteader's life in New Mexico gives another view of that great territory. Mr. Jones lives at an altitude higher than that of the warmer regions described by Mr. Saint-Amour. Both, we believe, are trustworthy accounts.

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# Garden and Orchard

## A Costly Experience With Rabbits

LATE last summer I took possession of a young orchard in Georgia which I had purchased a few months before. I found the trunks of my trees wrapped in paper, a precaution against the depredations of rabbits. As the weather was getting hot by the time I reached there and took charge, I feared to remove the papers, thinking the hot sunshine would injure the tender bark, but in the fall, as soon as the weather began to get cooler and the sun was running lower, I removed the papers and substituted a coiled-spring wire device, advertised in reputable papers and endorsed by experienced orchardists.

We had a long, mild fall without frost, and in November there came a sharp freeze. This freeze killed to the ground about two hundred of my best two-year-old trees, splitting the bark where the paper had formerly been. This spring I found the bark, from the ground up as high as the paper had been, black and decaying, although below the ground and above the decayed part the trees looked fresh. I cut off these trees just above the ground and shall try to coax a bud to grow above the point of union of graft and root.

But these were not the only ones destroyed. In the middle of last winter rabbits began eating through the coiled wires, and before I had noticed it another hundred or so were destroyed. I also read how easy it is to bluff the rabbits with lard and sulphur, so I removed the useless wire coils and applied the grease. This was effectual for a while, but about the first of March a horde of particularly hungry and demoralized bunnies invaded my orchard and chewed up another grist of trees, even girdling some five years old.

In desperation I hurriedly ordered wire net and am now encasing each trunk with a band of small-mesh galvanized wire netting. This I should have done at the start, and would probably have saved five or six hundred dollars' worth of trees. In justice to the wire-coil man, and also to the grease advocate, I will say that I am on newly cleared ground, that there is no grass or other green crop on the place, nor near it, and that rabbits are uncommonly plentiful. F. E. BOYNTON.

## Managing the Pear-Orchard

A NUMBER of varieties of pears are self-sterile, that is, in order to set a good quantity of fruit, the blossoms of one variety must be fertilized with the pollen of another variety. Almost any two varieties will cross, provided they bloom at the same time. Kieffer and Bartlett are usually planted together. If the orchard is to be known as a Kieffer orchard, a row of Bartletts should be set to about every four rows of Kieffers. Any reliable nurseryman will supply the information as to which varieties do best together.

The age at which fruit-trees should be set is a matter which at the present time is leading to a considerable difference of opinion among growers. There are many points in favor of planting young trees. They are cheaper, and the grower has more opportunity to shape the tree in the manner desired. Probably the youngest pear-trees, which it is advisable to set, are two-year-olds.

### Classes and Varieties

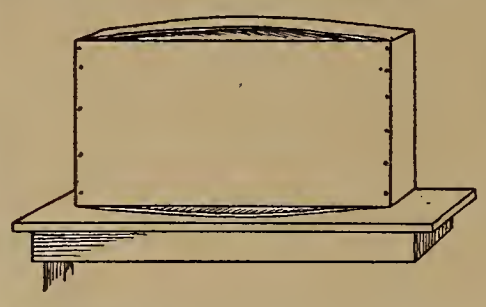
We usually divide pears into two classes, standard and dwarf. Standard pears are the European varieties worked on pear-roots. Dwarf pears are European varieties worked on the quince root. Sometimes a third division is made, called Oriental pears. The true Orientals are of Japanese or Chinese origin, but many pears classed under this group have been hybridized with European varieties. The standards are the largest type of tree. The dwarfs are smaller in size, and very heavy and early bearers. The Orientals are particularly strong and vigorous growers.

There are a goodly number of excellent varieties of pears. The Kieffer, on account of its regularity of bearing and good shipping qualities, is quite generally grown. It does not produce a very fine quality of fruit, however, nor does it reach its greatest size as far north as northern New York. This variety was first introduced near Philadelphia, and does best in about that latitude. The Bartlett is an excellent variety, and it was from a cross of this and the Sand pear that the Kieffer was produced. The Seckel is a pear of especially fine quality. The Sheldon is a large pear, buttery in texture. Other desirable varieties are Lamartine, Duchess, Manning Elizabeth, Frederick Clapp, Flemish Beauty, Malines, Winter Nelis, Anjou and Lawrence.

### Packing Pears for the Market

Unlike other fruits, the pear is of a finer quality if not allowed to mature on the tree. As soon as it has reached its normal size and commences to color, the fruit should be gathered and allowed to ripen artificially, in a cool place. If they are set where they are exposed to a draft of air, the skin soon wrinkles, on account of the loss of water from the fruit. This will also happen in a warm room, where the air is dry. The fruit at the top of the tree is usually ready to pick before that lower down, and with low-headed trees it is possible to do this, by using an ordinary step-ladder, without injuring any of the fruit or breaking the branches of the tree.

The fruit should be packed in boxes, each pear being wrapped in paper separately. It



is well to have a brand or trade-name for the fruit which is produced on the farm, and by selling the best fruit under this name a reputation is established. This label should be printed on each sheet of tissue paper in which the individual pears are wrapped, and another larger label should be pasted on the outside of the box. A little excelsior should be placed in the bottom of the box, and the pears be packed in layers, putting packing between each layer. The fruit should so fill the box that, when the cover is put on, it makes a slight bulge at the center, as illustrated. This will keep the pears from moving about in the package and bruising one another.

### Treatment for Pear Diseases

The most destructive disease of the pear is fire-blight *(Bacillus amylovorus)*. It enters the tree through the blossoms or where the bark is injured, causing a dying of the twig at the terminal end, and works back through the twig toward the center of the tree, killing the twigs as far as the organisms go.

The remedy is to cut off the diseased portion of the branch, several inches below the affected area, and disinfect the pruning-tools after making each cut, to avoid spreading the disease. Use corrosive sublimate (poison) one part to one thousand of water for disinfecting. Do not allow too rapid a wood growth. Other diseases are the scab, leaf-blight, and several leaf-spots. These may all be controlled with Bordeaux sprayings, the first application of which should be made when the petals fall, and the second and third should follow at intervals of about two or three weeks.

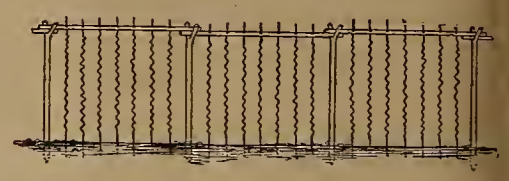
The pear-psylla and San-José scale are the most harmful insect enemies, and may usually be controlled by an application of lime-sulphur wash before the buds open in the spring. The twig-girdler causes a falling of twigs, which should be collected and burned. The pear-slug, which injures the leaves, may be controlled with arsenical sprays. E. P. WALLS.

## Simple Garden Trellis

THOSE who have not the small brush or branches of trees at hand with which to pole peas and beans may construct a suitable substitute that will serve the purpose at a very small cost.

Drive long stakes in the ground, having them as high above ground as the trellis is desired to run. The stakes should either be notched or have a fork at the upper end. Rows of any length may be thus trellised, but the stakes should not be over eight feet apart.

Take poles the thickness of your wrist and bore small holes into them every six or



eight inches, according to the distance between the hills you will trellis. Cut wires (about number eight) long enough to pass through the poles and stick well into the ground. Kink the wires as shown in the illustration, so the vines can cling to them. If the vines are very heavy, the top ends of the wires may be wound around the poles. After the garden season is over, the trellis should be removed and stored away. With good care, it will last for years.

M. COVERDELL.

## How Many Beans?

IT MAY be of interest to know that "King of the Garden" and other Lima beans average 625 to 630 beans to the quart, which, allowing two beans to the pole, will take about 314 poles. A quart of "Kentucky Wonder" beans will contain 2,290 beans and need 1,145 poles, while a quart of sugar corn averages 1,898 grains, or 633 hills, three grains to the hill. More than three grains is a waste of seed. C. E. DAVIS.

## Cherry-Tree Debility

COMPLAINTS are numerous this spring of cherry-trees dying out or having developed non-bearing habits. So general are these complaints that we think it worth while to try to solve the mystery.

There are four types of the cherry and three classes of roots on which they are grown. The Hearts and Bigarreaus are strong, upright growers and necessarily require a good root-system to sustain them.

The Dukes and Morellos are dwarfish in habit, grow more in bush form than tree, and require less nourishment in tree growth than do the sweet classes. The stocks employed in their propagation are the Mazzard, Mahaleb and the Morello, or common "pie-cherry." Owing to the fact that the first two named are imported from Europe chiefly, western nurserymen use the Morello stock in their stead.

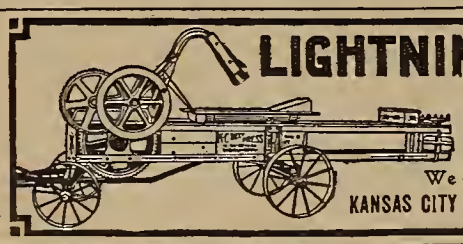
The Mazzard stock is the original of the Heart and Bigarreau classes, and to attempt to grow these on the Mahaleb stock is a work against Nature's rules. The Mazzard is a strong, upright grower with a free root-system.

The Mahaleb grows in bush form more dwarf than standard and has a weak root-system. Hence to bud the sweet cherries on this stock means failure. The sour Morello stock is a better grower than the Mahaleb, but its tendency to sprout is too great to allow its use with safety.

The Mahaleb cannot furnish the Hearts and Bigarreaus with sufficient nutriment, and even the Dukes and Morellos are dwarfed when it is used for stock. The danger in using the "pie-cherry" stock is that after a few years' growth, especially where plowing is done, the roots sprout so much as to rob the original tree of its vitality, finally causing decay and death. The safer way is to use Mazzard stocks for all classes of cherries and, in case of the Dukes and Morellos, root-prune where growth is too much forced. As to non-bearing habits, the Mahaleb bears young and is very prolific.

The Mazzard is a tardy bearer. From these two statements we see the incongruity of stock and scion as regards productiveness. The Sweets budded on Mahaleb stock would not receive fruit sustenance from its roots and blighted blossoms will result. One other source of unfruitfulness is the dissemination of many foreign varieties, especially those from Russia. Over twenty years ago the United States Department of Agriculture imported a number of Russian cherries and placed them in the experimental grounds of the state university at Ames, Iowa, for propagation and dissemination. From these people we received a number of trees representing six varieties of cherries and other fruits. These trees are now over twenty years old and have not yielded enough in the entire time to justify letting them stand.

No doubt many thousands of these trees have been sent out and many distributed by nurserymen propagating from them. If cherry-growers would confine their work to reliable and long-tried kinds, and see that these were grown on congenital stocks, there would be fewer complaints made of trees dying or failing to fruit. J. H. HAYNES.



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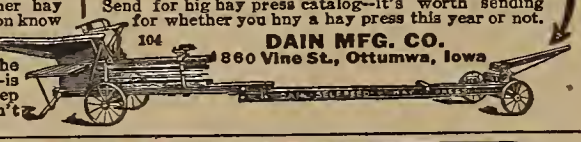

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# GARDENING

By T. Greiner

## An Enemy—Tiny But Formidable

The flea beetle is small; in fact, so small that gardeners usually underrate its importance, and fail to put the full blame on it for the injury it causes. The perforations in the leaves of tiny things, like cucumbers and melons, egg-plants, peppers and tomato-plants, potatoes, etc., may be small, but they do harm. They increase the evaporation of moisture from the leaf surface and tissue. They weaken the vitality of the plant and reduce its power of resisting the attacks of diseases.

Potatoes, for instance, when infested with flea beetles, are particularly subject to tip-burn. Our only safety lies in fighting this tiny, but formidable, foe early and late. Tobacco-dust, scattered freely over the plants, will drive these beetles away. Of course, it does not kill them. Spraying with the old Bordeaux mixture also has a tendency to drive the beetles off the sprayed plants, and I believe that the diluted lime-sulphur solution will be equally effective in that direction. I make a surer job of it, however, by adding arsenate of lead in strong dose (one ounce per gallon) to the diluted solution. If you use the commercial lime-sulphur solution, make it weak enough to be safe for the plants you treat with it. When diluted one to forty or fifty of water, lime-sulphur appears to be safe to use on potatoes, egg-plants, peppers, cucumbers, muskmelons, squashes, pumpkins and most other vegetable plants. Apply as often as needed.

## Watchfulness for Vine Enemies

Years ago the large, black squash-bug, a disgusting and ill-smelling fellow, used to give us lots of trouble. Then an unusually severe winter just about wiped it off the face of the earth, at least around here, and ever since it has not been able, in this vicinity, to hold its own against its parasites or diseases. In one respect this experience is encouraging. It shows that we are often given sudden and thorough relief from such pests by natural means, and that we need not take it for granted, when some such pest is abundant and destructive one year, that it will repeat the attacks the next year.

On the other hand, it will not do for us to rely too much on the aid of natural agencies. We may look carefully over our vine-patches to-day, without being able to find a single yellow-striped beetle, or a single black squash-bug, and yet to-morrow or the day after we may find our vines half eaten down by the first-mentioned pest, and plenty of squash-bugs in hiding near the stems of the squash, cucumber or melon vines. The treatment recommended for the flea beetle will also protect the vines from the attacks of the striped beetle. The beetle that eats of the poisoned leaf dies. But we cannot kill the sucking black bug by the use of poisons. The one way which in former days has helped us to subdue the black squash-bug is hand-picking. Go over the patch every morning and hunt for the bugs. You will find them near the vines, often hidden under stones, clods or rubbish of any sort. Pick them up with tweezers and mash them. Or throw them into a can containing some kerosene, or kerosene and water.

## The Cabbage Aphis

Two years ago the gray plant-louse, which attacks cabbages, cauliflower, turnip and similar plants, just about ruined these crops in this neighborhood. Fortunately, this is one of the pests that comes in destructive numbers only once in a number of years. Its own parasites and other enemies usually keep it fairly well in check. Sometimes it gets away from them, and when it is given a good chance, in a favorable season, it multiplies at an enormously rapid rate, and heroic measures must be resorted to to keep it under control. Its parasites and other enemies will then take care of the balance.

The commercial cabbage-grower, who must count the cost more closely than the ordinary gardener, may spray his fields with whale-oil or fish-oil soap solutions, the latter being probably the cheapest. For us, who raise cabbages and similar crops only on a home-garden or small market-garden scale, the easiest way to get out of the trouble is probably by spraying with tobacco-extract, such as "black-leaf tobacco extract." This is reduced one to sixty or sixty-five, with about a pound of hard soap (dissolved in water) added to every fifty or sixty gallons.

This addition is necessary to make the solution spread over the leaves. Otherwise it would roll off the leaves as water off a duck's back. The application can be nicely made with a knapsack sprayer, or with a compressed-air sprayer, but should be very thorough. I try to reach into the heart of the plant, and on the underside and everywhere possible. This enemy may not come on in destructive numbers this year, but better be prepared for its coming.

## Success with Rhubarb

The three or four inch coat of manure which I have spread all over the rhubarb-patch in early spring this year has had its effect. Although we have had no rain for a long time, and the land is dry everywhere, the rhubarb has grown, and is growing, wonderfully. The stalks are fatter than ever, and more of them. The demand keeps up. People evidently learn to use rhubarb more and more, not only for pie-material, but also for sauce. The quality of our rhubarb, owing to its rapid growth and brittleness, is exceptionally fine. Some persons commented on its "strawberry-like flavor." Be that as it may, the rhubarb crop has been very profitable these many years, and it seems to continue to be profitable. So easily grown, too. But it takes manure and good, warm land.

## Where the Big Potatoes Grow

"Knowest thou the land where big potatoes grow?" This, for the purpose of this article, seems to be an apt paraphrase of the opening sentence in Goethe's famous picture poem about the land where the lemons bloom and golden oranges glow amid dark verdure. To find the land where potatoes grow big without great effort on the part of the cultivator, you may go to the rolling country in the vicinity of the numerous small lakes in New York State, in the counties of Monroe, Livingston, Ontario, Yates and Steuben. The last mentioned alone has 26,000 acres of potatoes. A good share of these fine lands are pretty rough, for the whole section seems to consist of hills and ridges and mounds, with a maximum of hillside and a minimum of flat land. The general character of the soil is a deep gravel, so filled with stones of all sizes, with rocks and boulders, that it is often difficult to find loose soil enough to decently cover the seed-potatoes or corn when planting with the hoe.

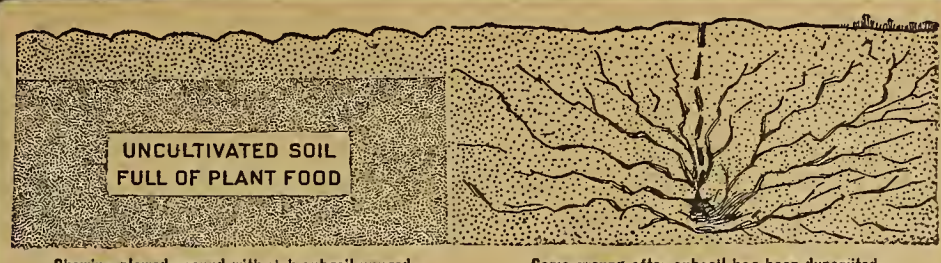
In this locality I had my first experience in potato-growing, forty years ago. It was well

The Land of the Big Potatoes

worth digging among the stones, large and small. We found the tubers, and big ones. No flats of showy loams that gave the big yields of wheat and rye, and corn-stalks twelve feet high, ever outyielded these rough, stone-filled, hillside soils in potatoes, or gave the size of individual tubers that we secured here with ease. I remember having grown over one hundred and twenty bushels of "Peerless" on a quarter-acre, with an occasional specimen tipping the scales at four pounds, and the Burbank at the rate of upwards of four hundred bushels per acre. A crop of three hundred bushels per acre of late potatoes was by no means an uncommon thing.

The potato has remained the most important money crop which the farmer raises in these regions up to this time. The methods of culture have changed quite materially in some respects. In those earlier days, the planting was all done with the hoe. The digging with the hoe, later with potato-hook or spading-fork. Now the planting is more generally done with the two-horse potato-planter, and the harvesting with the two-horse potato-digger. It, therefore, is easier now to grow two acres of potatoes than it used to be to grow one. Yields of two hundred and fifty bushels per acre are even now with these wholesale methods quite frequently reported, although the average is far below that figure. The one salvation of the farmer, here as elsewhere, is clover. Clover, with the help of a little farm manure, and in some cases of fertilizer, maintains the soil fertility. These soils are well adapted to clover-growing, and clover is the longest link in the usual three-link rotation, clover, potatoes, oats or barley, clover; or the four-link rotation, clover, potatoes, oats or barley, rye or wheat, clover, etc. The clover is mowed one year, the sod turned down with the plow in early spring, and the surface kept well tilled until planting-time, which lasts from the middle of May until early in June. Stable manure is applied whenever available, and a little fertilizer (seldom more than two hundred pounds per acre) is used in some cases when the potatoes are planted by machines.

On our stronger soils we have learned to plant potatoes in drills, and to lay the rows off in light ridges. The potato farmers in the hill countries still plant in check-rows, putting the hills three feet apart each way and hilling up quite high. They find this the better way, easier to cultivate, easier to dig, and the saving of labor is a great item.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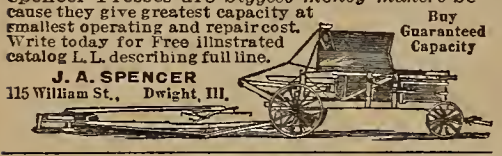

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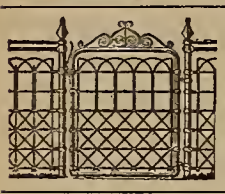

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# Farm Notes

## Try a Catch Crop

There is still time to get some return from land where disaster has overtaken the regularly scheduled crop. Frost, drouth, insects or hail may have left fields bare of the crop originally seeded for a harvest this season, or an early-maturing crop has left the land idle. It is, therefore, good business practice to take thought of the catch crops that may be utilized by late seeding.

### Buckwheat

The following forage crops can be made use of for this purpose in different sections of our country: Beginning in the more northern latitudes, buckwheat is sown up to July 10th or July 15th, where frost can be counted on to hold off until late in September. A well-prepared soil fairly fertile in phosphoric acid and potash, seeded with buckwheat at the rate of three to five pecks per acre, according to the variety, may produce from fifteen to thirty-five bushels per acre of this excellent grain. It is rich in protein, and though the straw is of comparatively little value for feeding, the soil-renovating effect of the crop is pronounced. This crop is something of a gamble in regard to the grain filling, since much depends on the weather conditions during the period of blossoming.

Cow-pea

### Rape

Rape is one of the most satisfactory of catch crops for cool, moist climates, as it makes a very rapid, heavy growth of succulent forage that is well relished by cattle, sheep and swine. For a catch crop it may be sown any time in July or the first part of August. Following peas, early potatoes or to replace a failure of corn, hay or other crop, the seed-bed should be well pulverized and contain a generous quantity of available plant-food, including nitrogen. Soil and fertilizers suitable for wheat, cabbage or corn are adapted to rape. Sown among corn at the last cultivation, it will often supply good pasture after the corn is harvested. Sown by itself, a good supplementary green feed for dairy cows and swine may be expected until the ground freezes. From five to seven pounds of rape-seed broadcasted, or three to four pounds in drills, are required per acre. Dwarf Essex or Victoria rape are among the best varieties.

Heads of Pearl millet; *a*, in bloom; *b*, showing the seed

### Winter Vetch

Winter vetch sown from August 1st to September 15th in the humid sections will supply a heavy crop of forage for early spring feeding, but, being a legume, it does not always grow readily until the soil becomes inoculated with its appropriate bacteria. Sandy, gravelly and well-drained soils are best adapted to vetch. For early forage or for hay it has been found preferable to seed with thirty pounds of vetch-seed and one bushel of beardless wheat or rye per acre, or with one-and-one-half bushels of winter oats. Vetch is a valuable soil-improver and is growing in popularity for use for catch and cover crop purposes.

Rape

### Millet

Millet is one of the stand-bys as a catch crop and can be seeded as late as July 20th wherever there is immunity from killing frost for from sixty to ninety days after seeding, provided sufficient soil moisture can be counted on to make the rapid growth characteristic of this crop. Plant-food must be very abundant and available, and the soil prepared like an onion-bed, in order to insure a heavy growth. Two or three tons of dry hay (and green fodder in proportion) are possible with German and Japan millet. Pearl millet will produce even heavier yields, and several successive cuttings may be made. From thirty to forty pounds of German and Japan millet seed should be used if broadcasted, and three to six pounds of Pearl millet if drilled to be cultivated. Millet must be cut for hay when the seed is in the early milk stage. Both as a green fodder and as hay it is valuable and much relished by all stock when fed in moderation. Fed to horses, except in quite limited quantity, millet sometimes induces kidney derangement.

Pearl millet

### Cow-Peas and Soy Beans

Cow-peas are proving a valuable catch crop south of the thirty-ninth parallel and in various sections considerably north of this geographical line. The New Era, Warren's New Hybrid and several other varieties will mature a crop, including the seed, in from sixty to seventy days from sowing and be available for hay and soiling or pasturing purposes in considerably less time. From one to two tons of hay and ten to fourteen bushels of seed per acre can be produced from this crop, the hay being fully equal to red clover and the seed about on a par with cotton-seed and linseed as a concentrate. This crop is adapted to sweet, well-drained soils of fair fertility, after the soil inoculation is secured. Thorough soil pulverization and considerable available phosphoric acid and potash will profitably enlarge the production. Few, if any, legumes are superior to cow-peas as a soil-improver for increasing the amount of nitrogen. The residual effect in increasing crop production in the first crop following cow-peas has been found by the Alabama Experiment Station to be from five to eleven dollars per acre greater than when preceded by non-leguminous crops otherwise identically handled. From four to five pecks of seed per acre are required for broadcast seeding, and from six to ten quarts if the intention is to cultivate. What has been said of cow-peas holds true largely of soy beans, except that the cow-pea ordinarily is more distinctly a forage crop and a smaller yielder of grain.

Soy bean

### Sorghum

The different varieties of sorghum offer an unsuspected source of catch-crop fodder to many farmers outside the corn-growing states and to others where both maize and sorghum flourish. One of the strongest recommendations for sorghum is its drouth-resisting quality. This is particularly true of the non-saccharine sorghums, known as the Kafir group and durra group, including the red Kafir, white-hulled white Kafir, black-hulled white Kafir, and, in the durra group, brown durra, Jerusalem corn and yellow milo. The Kafir and Jerusalem corn yield a heavy production of palatable, succulent forage, in addition to a good yield of grain. Kafir remains succulent until the grain is matured. In this respect it is preferred by stockmen to durra. The Kafirs mature seed in from one hundred and ten days to one hundred and thirty-five days and durra in from ninety to one hundred and ten days. These sorghums are now recognized as of great value in the Panhandle and adjacent sections of Texas, Oklahoma, Arkansas and in an enlarging area of the semi-arid or dry-farming region.

Saccharine sorghums are also drouth-resistant to a somewhat less degree and produce equally heavy crops of green forage or dry hay—from eight to twenty tons of green forage, two to five tons of cured hay and twenty to forty bushels of grain per acre. These figures are about an average yield for both the saccharine and non-saccharine sorghums. The culture for the sorghums is very similar to that required for corn or cotton. A deep, mellow seed-bed, plenty of available plant-food and clean culture are the essentials. When broadcasted, from one-and-one-half to two bushels of seed per acre are required, and from eight to twenty pounds when planted to be cultivated.

Besides the standard catch crops named, there are a number of others especially adapted to more limited areas and special circumstances. Among these are the velvet bean, Kudzu vine, sweet clover, bur clover and Lespedeza. In some sections several of the more common of the catch-crop plants enumerated may do about equally well when used for this purpose. The important matter is to study them individually by experimenting and then determine which are best suited to any particular section or purpose. Each farmer can then best judge which will be of greatest value to him. The fact should not be lost sight of that the soil should be kept at work and not allowed to loaf. When the soil is filled with growing plants, there is no chance for loss of volatile forms of plant-food, and the vegetable matter left by the decomposing roots furnishes the best possible physical condition for future crops.

When beginning to feed any of the succulent catch crops in green condition, vigilant care must be observed to prevent bloating. The feeding and pasturing must be begun very gradually, limiting the time the stock have access to such succulent pasture to half an hour or an hour for several days and not allowing unrestricted feeding for a week or ten days.

B. F. W. T.

## Brains Better Than Fertilizer

A subscriber has the following to say of his experience in corn culture, fertilizers and soils in Maine:

From my experience in cultivating corn I would say, "Go as near the roots as you can and not cut them." The matter of depth depends upon the season. If very drouthy, merely keep the weeds down. Do not be afraid to hoe dirt up around the stalks. In planting, I drop seed by hand in a circle ten inches across. Machine-planting always bunches the seed. Last year I planted field corn, kidney beans and squash on the same piece the middle of June. Part of the piece had been planted two seasons to potatoes; the balance had never been planted before in the memory of the oldest settlers. August 24th, I picked a squash weighing fifteen pounds.

On the end that was never planted before, the corn stood seven feet tall and the beans extra good. At the other end the corn stood ten and twelve feet tall, with some ears over a foot long. The beans were very rank and heavily podded, but one third of the pods did not have time to fill owing to early frosts, September 10th and 24th.

I notice Mr. Greiner's writings relative to soils. He is correct in the main, but he does not consider that some farmers plow a piece of land and stick in a conglomeration of seed regardless of what the soil is good for. If any man, not afraid of work and not afraid to put up with some privations he would have in the West, will come to Maine on a still hunt (letting real-estate men alone) he will find plenty of rich soil cheap, dirt cheap. It is a shame to see so much rich land lying idle for lack of brains and muscle.

I came out of the office a sick man and I am far from a well man to-day. I did not have a cent five years ago; now I own a large farm with four hundred and ten dollars mortgage, with a fine pair of horses and enough up-to-date tools to work the farm. It was done with honest brains. I have not used over two hundred pounds of fertilizer. I call it the farmer's curse, when it is used without discretion. I would not be here now if I had used it as others do.

A little barn dressing goes a long way on Maine soils. I get about seventy bushels of potatoes at a money outlay of two dollars and twenty cents for bug death. I got six and three fourths bushels of potatoes from a piece twenty-seven feet square.

C. G. Penney.

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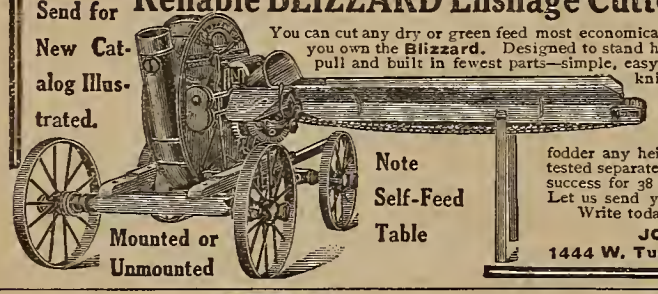

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# Poultry-Raising

## Feeding for Bright-Colored Yolks

In the development of the poultry business, scientific feeding has been one of the important factors, not only in increasing the total production, but in raising the standard of quality of the egg itself as a food product.

Feeding may affect the quality of the egg in two ways: as to flavor, and as to color of the yolk.

### How Feed Affects Flavor

As regards flavor, there is a wide difference in eggs. While no single breed furnishes eggs of any certain flavor, the eggs of different breeds under the same conditions being exactly similar, yet the difference between the eggs of two flocks of the same breed, kept under different conditions, may be very marked. Eggs from fowls fed on clean, wholesome food are always superior in flavor to those fed on inferior or tainted food of any kind. Tainted meat, musty grain and rancid food of any kind impart a disagreeable flavor to eggs that detracts much from their market value, if it does not render them entirely useless.

As to color in the egg, the general public is to a large extent in error as to the relation of color in an egg to its nutritive qualities. Most people believe that an egg with a deep yellow yolk is more nutritious than one with a pale yolk. It is also the general opinion in some communities that an egg with a dark shell is more nutritious than one with a white shell. Careful analyses, however, have failed to uphold these beliefs, which are not really based on any well-defined theory. The analyses show that there is not very much variation in the nutritive value of eggs, and that what variation there is has no connection with the color of the yolk or shell. These variations will occur as often between eggs of the same color as between others.

Feeding Hens Kale To Give the Yolks of the Eggs a Rich Color

However, because of the fact that this idea of the effect of color upon the food value of the egg is so general, the matter has become of commercial importance, as all of the fancy trade demands an egg with a yolk of a rich orange color.

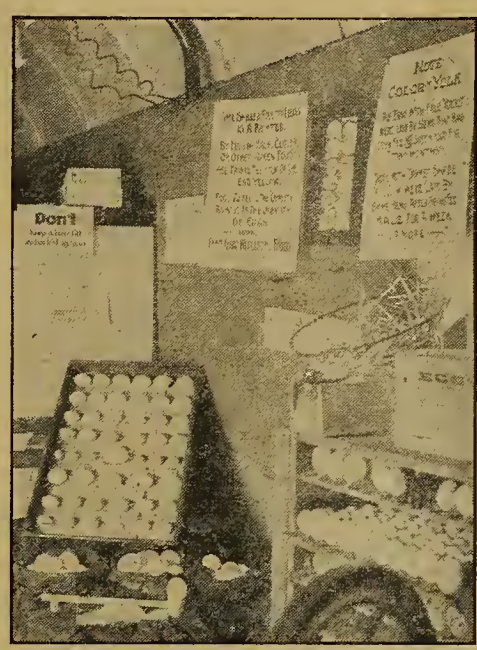
### Alfalfa Gives Bright Yolks

It has often been noticed by poultrymen that the yolks of eggs laid during the winter months are not as well colored as those laid in summer. It was believed by some that this was due to a lack of green food, and, in order to test the correctness of this belief, a series of experiments were carried on at the Utah Experiment Station by Prof. James Dryden, now of the Oregon Agricultural College, during the winter of 1904. The fowls in the test were divided into a number of different pens, being fed several different rations, some with corn as the principal grain, and others with wheat as the main part of the ration, but all being fed sugar-beets as a source of green food. The corn fed was a mixture of white and yellow, the white predominating, but did not seem to affect the color of the yolk, as all the pens at the beginning of the experiment were laying eggs with pale yolks.

Gradually dry alfalfa-leaves were added to the food of several of the pens in addition to the ration they were already getting, including the sugar-beets. Two weeks after the alfalfa was first fed, a test for color was made, and the yolks from the alfalfa-fed pens were found to have a uniformly rich color, while those from the other pens, which were fed no alfalfa, continued to be very pale in color. One pen was fed skim-milk in place of meat-scraps, but this did not seem to affect the color of the yolk. The results of this test show that it is not merely a matter of having plenty of green food, but of having plenty of the right kind of green food, if a bright-colored yolk is desired. More recently experiments have been carried on by Professor Dryden at the Oregon Experiment Station along this same line, using kale as the green food fed.

### Good Results with Kale

This was fed to the hens in combination with various rations, as the only source of green food. This proved to give a very uniform and desirable color to the yolk, and, owing to its crispness and succulence, was greatly relished by the fowls. The fowls were given no green food for a week before the experiment, and consequently ate heavily of the green food when it was given to them. The eggs laid at the beginning of the test were quite pale in color, but after four days of feeding on kale the yolks were of a good, rich color, which continued to be the case as long as the kale was fed. At the end of the test the green food was again taken away, and it was found that the effect of the green food upon the yolks lasted about two days, when the yolks were again of the light color.



Corner of Poultry-Car—Demonstration Train Sent out by Oregon Agricultural College

Note frame in upper right-hand corner, showing comparison of light and dark yolks

### Experiments with Grains

The West Virginia station has also carried on experiments with different grain foods to determine their effect on color. When the grain ration consisted of wheat, oats, white corn, or buckwheat, either fed alone or in combination, using sugar-beets for the green food, the yolks were of such a pale color that they were not suitable for fancy trade. When fed on white corn, the yolks were very light colored, while yellow corn gave the rich orange color desired.

Clover as a green food is also claimed to give a good color, as is also rape, and probably vetch, and other fresh grasses.

In feeding for color, one should not feed any coloring food too exclusively, as it is possible to get too pronounced a color, but with a proper balancing of the ration this should not occur.

In this connection it is interesting to note the results of recent experiments at Cornell in feeding dyes to chickens. The dyes used colored the different parts of the egg, and also the muscles and feathers of the fowl. The object was to study the structural growth of the egg, the rate of growth of feathers, and to note the time that coloring matter would stay in the blood and affect the egg.

One dye, fed daily, produced highly colored rings in the egg alternating with rings of a much paler shade. Feeding at each meal gave the same result, not producing a solid color. This showed that the egg was built up in layers with the outside of each layer of more of a fatty nature than the rest, as the dye used affected only the fat. This experiment showed that the color fed remained in the blood eight hours. The hatching of the eggs was not impaired by the dyes, and the chicks were colored wherever there was fat in the body. When food was withheld from these chicks for four days, the fat was used up, with the result that the color was all gone. The other dye fed colored all feather growth as long as it was being fed, but as the dye lasted only eight hours in the system, it had to be fed continuously to give a continuous color. The color on the feathers is permanent, however, once it is given. The growth of the feathers may be studied by feeding dye for a time and then giving a rest, then feeding it again. There will then be a white part on the feather between the two dyed portions, and the length of this white part will give the rate of growth for the time no dye was fed.

In conclusion, it may be said that the proper color in the egg is a thing much to be desired, and that we may determine from the experiments here given that, while some grain foods may add color to the yolk, the question for the average poultryman will, in the main, resolve itself into a question of securing plenty of fresh, green food at all times of the year. Chas. S. Brewster.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Visible Writing

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The writing machine of top notch reliability.
The writing machine that is simple and convenient to operate.
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A YOUTHFUL CRACK-SHOT

THIS is the wonderful King Air-Rifle. It is a Repeater—shoots 150 times without reloading. It is just the rifle for a Boy. **You can get it by doing Farm and Fireside a favor.**

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Boys, this rifle shoots accurately. Look out, crows and hawks, if a boy ever gets after you with this King Air-Rifle.

It uses no powder—makes no noise—uses air and shot. You will have use for it every minute.

Expert workmanship has made this a wonderful gun. This rifle is provided with pistol-grip, true sights, and is so strongly made it is almost impossible to get out of order. It is extremely simple in construction.

It makes boys grow to be manly, self-reliant men. It develops keenness of sight, steadiness of nerve and quick, alert action. It makes them healthy and strong—sends them out of doors.

Any boy would be happy to get this rifle. We are glad to help every boy get one—without having to pay a cent for it.

Thousands of happy boys have already earned a Rifle easily from Farm and Fireside.

How to Get This Rifle

You can get one, too, without spending a penny if you will do a little work for it. Just write a post-card to-day to the Rifle Man—say you want to earn a rifle. He will be glad to help you.

The Rifle Man, Farm and Fireside
SPRINGFIELD, OHIO

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Largest producers of asphalt, and largest manufacturers of ready roofing in the world.

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The Standard Veterinary Remedy. 21 years sale. Send for booklet.

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Makes the horse sound, stay sound

**DEATH TO HEAVES**

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**THE NEWTON REMEDY CO., Toledo, Ohio**

**AGENTS $3 a Day**

NEW PATENTED LOCKSTITCH AWL

Sews Shoes, Harness, Buggy Tops, Canvas, Grain Bags, Anything. Sells at sight. Astonishing low price to agents. Big profits. To show it means a sale. We want a few good, live hustlers in each county. Splendid opportunity to make big money. No experience needed. Write quick—now—for terms. A postal will do. Send no money.

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# Farm Notes

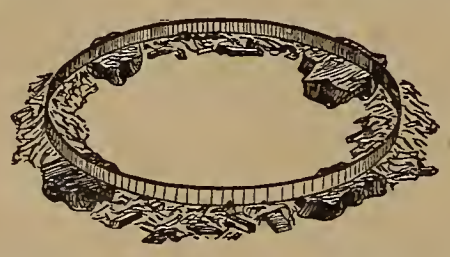
## To Set Wagon-Tires

When your wagon-tires get loose, set them yourself. Mark the tires so that each tire can be replaced on the wheel to which it belongs. Place the tires on stones to raise them three or four inches from the ground and over them build a fire of chips or any material that will produce sufficient heat.

While the tires are heating, prepare the wheels as follows: Procure some coarse canvas, such as wagon-sheets or stack-covers. Cut this canvas in strips a little more than three times as wide as the wagon-fellies are thick. Fold the strips to three thicknesses and tack them on the rim of the wheels so that the edge of the strip is even with the edge of the fellies on one side and projects beyond the edge of the fellies on the other side. If the tire is very loose, it may need more than three thicknesses of the cloth, but generally three will make the tire tight enough.

Next, draw the projecting edge of the canvas down onto the side of the fellies and tack it there securely. Now lay the wheel on a pair of saw-horses or similar support with the side up that has the canvas tacked to the side of the fellies. Provide a good supply of water in buckets, and a trough. When the tires are hot, wet the canvas strip on the wheel, pick out the tire that belongs to that wheel and drop it in its place over the wheel and commence pouring the water on.

As the tire shrinks, see that it is on the wheel evenly, that is, does not project over the felly more on one side than on the other. The tire can be driven either way by striking with a hammer where needed. When it has



shrunk enough not to slip, put a stick through the hub and whirl the tire in a trough of water until it becomes cool and ceases to steam.

You will have a better job than the blacksmith will do, because the canvas gives the tires a much better grip on the fellies than is possible where the tires rest directly on the wood rim. Court W. Ranslow.

## Two Trees or One?

The curious forked tree here illustrated has two trunks which unite at a considerable distance from the ground and merge into one.

This tree is three miles from Caborn, in Posey County, Indiana. It was there when white people first settled in this country.

more than fifty years ago. One side of the tree is rotting, and it will probably not last many years more. Louis B. Seifert.

## A Strong Stone-Barrow

I have found this barrow very useful in moving stones too large to be easily moved by hand. Take a piece of one-and-one-fourth-inch iron pipe a little longer than twice the length of a wheelbarrow handle. Bend it in the form of a V, then bend it at A and C so as to make an offset of six or eight inches. At DD drill holes for the wheel-bolt; use any strong wheel. Then at FF and GG drill holes for small bolts with which to fasten oak crosspieces (A and A) (Fig. 2). Now make two bails eighteen by fifteen inches (Fig. 3) of one-half-inch steel rods and fasten to the oak crosspieces with two hooked bolts, as shown in the center of AA (Fig. 2).

The fifteen-inch sides of the bails should be bent so as to fit around the stone.

To use: place barrow over stone and drop the bails over it, letting them pass partly under. Then lift on handles. The weight of the stone rests on the bails and prevents them from opening. To unload, lower handles, letting the stone rest on the ground. Then with your foot lift one bail from rock and raise handles. V. L. Dally.

## That Balky Hydraulic Ram

Having read with interest the article by Marshal O. Leighton on the "Hydraulic Ram," I would like to add a few suggestions as to "why it balks."

More than forty years ago it was my "chore" as a boy to go to the spring and start the ram. That ram was one of the balky ones, and this boy, wishing the time for his own amusement, set to work to make that ram run without stopping, and he succeeded.

Since then the writer has never failed to make a balky hydraulic ram do full duty. In every instance I have found the failure of a ram to work has been due to the "don't know how" of either the party who installed the ram, or of the one using it. Under the right conditions a hydraulic ram will do its work with absolute certainty.

Experience has shown that a frequent cause of balk is the exhaustion of the air-cushion in the air-chamber—due to the water absorbing the air under pressure—a condition that can be remedied by simply drilling a very small air-vent in the feed-pipe, just outside the connection with the ram. This allows an intake of air that balances the absorption, and keeps the necessary air in the chamber. N. E. Cowles.

## The Latest Agricultural Reading

**The Report of the First Annual Convention** and show of the Northwest Angora Goat Association held at Portland, Oregon, January 4 to 7, 1911, has been issued. While the Angora goat will not eat logs and pull stumps, it will successfully kill brush of almost every variety. Other merits are described in the attractive and well-illustrated booklet which the secretary wishes to put into the hands of everyone interested. Pages, 61, distributed, on receipt of five cents to cover postage, by Alva L. McDonald, Portland, Oregon.

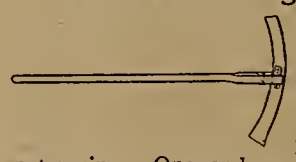
**The Famous Grundy Method,** by Fred Grundy, a well-known Farm and Fireside contributor, has appeared in its eleventh edition.

Pages, 124; illustrated; price, $2.00; published by the author, Fred Grundy, Morrisonville, Illinois.

**The Gladiolus,** by Matthew Crawford and Dr. W. Van Fleet, is a practical treatise on the culture of this attractive flowering-plant, with notes on its history and diseases. Pages, 88; price, post-paid, $1.25; Vaughan's Seed-Store, 31 West Randolph Street, Chicago, Illinois.

**Concrete in the Country** gives specifications for and clearly explains the construction of concrete buildings, feeding-floors, walks, troughs and sanitary conveniences for the farm. The illustrations are numerous, interesting and well chosen. Pages, 112; price, 25 cents; published by the Association of American Portland Cement Manufacturers, Philadelphia, Pennsylvania.

## Ax-Hoe for Digging Dock



One of the handiest implements we have is an ax-hoe I made from one ply of a broken seat-spring. One end can be made broader than the other if desired. Punch two holes, each about two inches from the middle. Now take two irons, one eighth of an inch thick, one inch broad and about eight inches long. Each is bent over at right angles two inches from the end and holes are made in the short arm for riveting them to the blade. Two more holes are drilled in the long arm for receiving the handle.

The handle is made long enough so that one does not need to stoop. This implement is light and very handy for digging dock and thistles, as well as being a very useful tool in the garden. Alvah Blackburn.


# Get Oversize Tires

## Avoid Blow-Outs—Save Overloading

**Goodyear No-Rim-Cut tires—10% oversize—cost no more than tires that rim-cut, or tires not oversize.**

The sale of Goodyear No-Rim-Cut tires has multiplied six times over in the past two years. Over 600,000 have already been sold.

Sixty-four leading motor car makers have contracted with us for these tires. The demand from users is now so great that our mammoth factories run night and day.

This patented tire has become the sensation. It is saving millions of dollars to motor car owners. It is a tire that you should know.

**No Hooks—No Bolts**

The No-Rim-Cut tire has no hooks on the base. No tire bolts are needed to hold it on.

Into the tire base we vulcanize flat tapes made of 126 braided wires. These make the tire base unstretchable. The tire can't come off because nothing can stretch it over the rim flange. But when you remove one flange, the tire slips off like any quick-detachable tire.

This braided wire, flat tape feature is controlled by our patents. It is the only way known to make a safe hookless tire. That is why other tire makers still recommend the old-style clincher tire.

tire—the removable rim flanges must be set to curve inward. They must grasp hold of the hooks in the tire base, to hold the tire on. Note how those thin flanges dig into the tire when deflated. That is the cause of rim-cutting, which may wreck a flat tire in a moment.

**10% Oversize**

The No-Rim-Cut tire, where the rim flanges flare outward, can be made 10% over the rated size and still fit the rim. And we give you that oversize without extra cost.

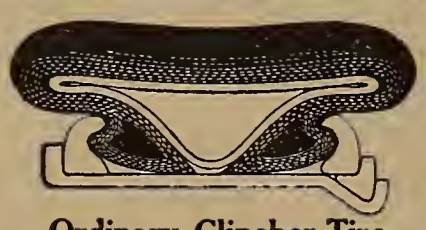
That means 10% more air — 10% greater carrying capacity. And that, with the average car, adds 25% to the tire mileage.

This oversize takes care of your extras—top, glass front, etc. It avoids the overloading which causes blow-outs on nine cars in ten which have skimpy tires.

These two features together—No-Rim-Cut and oversize—will under average conditions, cut tire bills in two. Yet these tires cost you nothing more than other standard tires. Do you wonder that men who know these tires insist on getting them?

**The No-Rim-Cut Tire**

This tire fits any standard rim. Simply reverse the removable rim flanges—that is, slip them to the opposite sides. They will then curve outward, as shown in the picture above. The tire comes against a rounded edge, and rim-cutting is made impossible.



**Ordinary Clincher Tire**

In the ordinary tire—the clincher

**GOODYEAR No-Rim-Cut Tires**

Our latest Tire Book, based on 12 years spent in tire making, tells many facts which motorists should know. Ask us to mail it to you.

**THE GOODYEAR TIRE & RUBBER COMPANY, 60th Street, Akron, Ohio**

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(324)

# Live Stock and Dairy

## Advertising and Live-Stock Sales

REALIZING that only a small portion of the surplus stock of any breeder of pure-bred animals can be sold in his immediate neighborhood, A. H. Kuhlman, a graduate of the Wisconsin College of Agriculture, in 1910, investigated the relation of advertising in the periodical press to the sales of pure-bred live stock, to fulfil his thesis requirement.

He obtained his data from seventeen Wisconsin breeders who had been advertising, in the periods between 1900 and 1907, in prominent live-stock papers. Seven Holstein, six Guernsey and five Jersey breeders were represented. Incidentally it was possible to compare the three dairy breeds as to popularity and advertising results.

### Conclusions Reached

1. Mr. Kuhlman concluded that the advertising of the individual breeders and of the different breeds has increased during the period of 1900 to 1907 inclusive.

2. The number of sales of the individual breeders of the different breeds has increased during the same period.

3. Fluctuations in the amount of advertising and the number of sales, in general, are simultaneous, or the increase in sales follows the increase in advertising within a period of about six months.

4. The average number of column-inches required for one sale has decreased since 1900 from 3.6 column-inches in 1900 to 2.3 column-inches in 1907 for the seventeen breeders taken collectively, but variations occur in the separate breeds. The ratio of the number of column-inches of advertising to one sale is the greatest in the Jersey breed and the smallest in the Holstein.

5. The total amount of advertising and sales increased from 1900 to 1907, but the number of sales has increased in a greater proportion, showing that better results were obtained from advertising in 1907 than in 1900.

### Popularity of the Breeds

The Holstein, perhaps the most popular cow in Wisconsin, shows a gradual increase in both advertising and sales.

The Guernsey shows a gradual increase in both sales and advertising to the middle of 1906. From then on until the end of 1907 there is a gradual decline. However, both the advertising and the sales were greater at the end of the year 1907 than at the end of the year 1904, when the greatest increase began.

The total advertising of the Jersey breeders exceeds that of the other two breeds, and while the advertising has increased, the sales have not varied much during the eight years. It must be taken into consideration, however, that one of the Jersey breeders, who had a few animals of popular breeding for sale, advertised so heavily as to throw the average a little out of balance.

### Present Outlook

From these figures it would appear that the prospects for the advertising of live stock in the periodical press are very bright. The very fact that the advertisements have increased, and the sales more than kept pace with them, shows that not only are breeders learning the advantages of such advertising, but also that people are more ready than ever to buy stock from men who do advertise. In fact, so pronounced does this tendency seem that it is probably the only means a breeder has to sell any considerable stock to advantage.

Another point, not mentioned in the thesis, but applying to the subject, is that on the majority of successful farms, where pure-bred stock is kept, the sales of live stock are just about as great as the sales of live-stock products. In other words, in dairy herds the milk and cream sold would represent about the expenses of the farm; the live stock would be the profit. Thus the greater the sales of live stock, the greater the profit. So if, through the periodical press, the breeder is able to sell all his pure-bred stock at full value, the profits of his farm would have the same relation to the advertising as the advertising has to the sales. W. A. FREEHOFF.

## To Teach a Colt to Back

A MARYLAND subscriber wishes to know how to teach a colt to back.

Stand on the ground behind the breaking colt and pull hard, but steadily, upon the reins, saying, "Back! Back!" This, of course, the colt does not understand, and he will resist the pulling for some time, but finally, to relieve the pressure on his mouth, will take a step or a half-step backward. Watch him closely for this sign of compliance, and the moment it is shown release the pressure on the bit, then repeat the lesson.

Remember that the secret of success is in releasing pressure the very instant a backward movement is made. For if you keep on pulling, you do not convey to his mind any intelligible idea of what you want of him. But by releasing pressure the colt soon learns that he can escape the painful pressure on his mouth by simply stepping backward and is prompt to avail himself of the privilege.

When he will back nicely in this way, get onto the breaking colt and repeat the lesson. Don't make your lessons too long, but have them short and oft repeated, and always take pains to pet up the colt just after he has yielded cheerfully to what you require of him. In this way the recollection of his obedience keeps in his mind.

I have heard it said that "it takes a year to teach a colt to back," but I have never yet seen a colt that could not be taught to back in thirty minutes and often in less time, if the right methods were used.

DAVID BUFFUM.

## Trough for Tagging Sheep

TO MAKE a trough useful in tagging sheep, take two boards about four feet long and ten inches wide, and nail them together as illustrated. Then take four pieces and nail on for legs, which are braced in any convenient manner. In this trough lay the sheep on its back.

I have used this device with success for two years and find that when a person has a great number of sheep to tag, it is much easier on the person and on the sheep than when they are tagged on the floor.

ERNEST H. REED.

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The amount of water contained in even the best grades of butter varies greatly. Many tests show as much as twenty per cent. of the whole weight, but it must contain less than sixteen per cent. in order to be legal.

Don't attempt to raise the calf on skim-milk alone, but get it to eating small grain and clean clover or alfalfa just as soon as possible, to help supply something to take the place of the cream that has been extracted from the milk it drinks.

If more of our farm lads had the courage and common sense to learn the art of milking with both hands, instead of learning to use both hands in manipulating a typewriter, there might be fewer run-down farms, more happy country homes, and less congestion of the cities.

## Soiling for the Dairy Cow

BY "SOILING" is understood the practice of keeping animals away from pasture and bringing their feed green to them. Soiling is quite common in thickly settled districts, while it is almost unknown in sparsely settled districts.

This is because in thickly settled districts land is high and labor is generally cheap, while in thinly settled districts the land is cheaper and labor is higher. In thinly settled districts, therefore, the cheapest thing to do is to let the animals hunt their own food.

As fast as a country becomes developed, it becomes more and more necessary to get the greatest yield possible from each piece of land.

In the case of dairy cows, soiling does this as compared to pasturage. The chief reason is that the ground that produces the green food for cattle will produce a great deal more when it is not tramped.

Every pressure of the cow's feet on the soil compacts it and reduces its power to produce food. Injury results in both dry and wet weather. Sometimes a bare spot in a pasture will remain for several years unproductive. This is avoided by soiling, and the land is made to produce its greatest crop of green feed.

Still another reason for soiling is the saving of manure. When the manure is dropped on the pasture in dry weather, much of its value is lost before it gets into the ground, but when the cows are kept in one place throughout the summer, the manure produced during that time is as great as it is during the winter. It is then put into the soil of the plowed fields, and practically all of it is saved and can be used on the field which needs it most.

There are still other factors in favor of soiling where land is high. One of these is that crops other than grass can be grown on the land, and a greater amount of matter obtained than in the case of grass.

One of these plants is Indian corn, which can be grown for soiling purposes far north of the latitude where it can be grown for the maturing of the seed. Many who have tried soiling have been able to produce fifteen tons per acre, for either direct feeding or for silage.

This makes it possible to keep on the same land more stock than can be kept where the cows are pastured in the summer and fed dry hay in winter.

Soiling makes it possible for good-sized herds of cows to be kept on the edges of cities where it would be impossible otherwise. In fact, it is one of the directions in which our dairying will be greatly developed in the future. R. B. RUSHING.


# This Is Why!

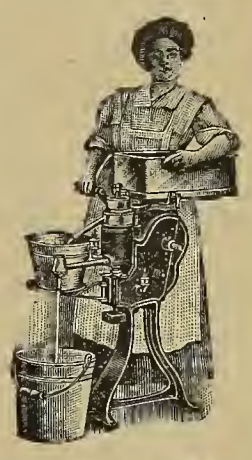
Putting the matter as briefly as possible, the reasons for the **absolute superiority** of the

## United States Cream Separator

over **all other Separators,** are as follows:

The **United States Separator** employs a device for delivering the incoming whole milk back of the cream wall, thus preventing any possible remixing of the cream with the skimmilk. This device is patented by us, and **can be used on no other Cream Separator.**

The **United States Separator** employs a skimming device which by reason of its non-aligned channels, subjects the whole milk to a **higher degree of centrifugal stress** than any other skimming device. This, also, is **our patent;** it can be used on no other Cream Separator.



The **United States Separator,** by reason of its highly efficient skimming device, can be **thoroughly washed and made sanitary** (as the records show) in 10 seconds. Because the same principle is used in washing as in skimming.

The **United States Separator** is **built to last a generation;** and it does. Sixteen, seventeen and eighteen years of perfect work, is the record it has made.

The **United States Separator,** by reason of its modern and skillful construction, is now the **easiest running Separator built.**

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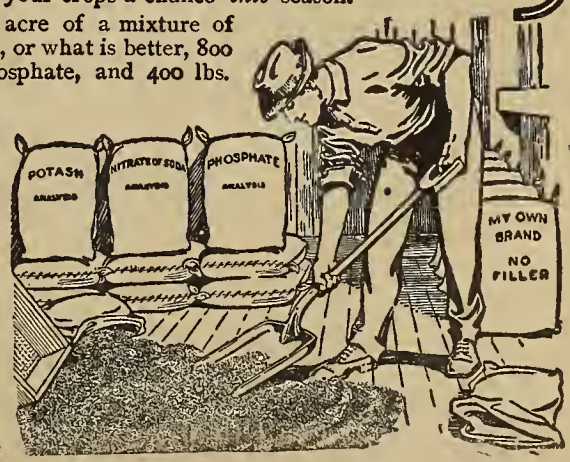

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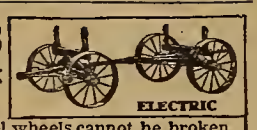


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# Live Stock and Dairy

## How, When and Why to Dip Sheep

Dipping sheep to be a practical success must be thoroughly done, and when it is, there are no external parasites in the flock. Owing to the efficient work of the United States Department of Agriculture, scab has been almost entirely eradicated from the flocks of America; still there are occasional outbreaks, showing that in out-of-the-way flocks it still exists. But the tick is with us in great numbers and we must dip to rid the flock of that pest.

Dipping is such a simple operation that when the life histories of the tick and the scab mite are known, it is an easy matter to entirely rid a flock of either, but the work must be carefully and thoroughly done. Two dippings must be made at the right time and every part of every sheep dipped each time.

### Coal-Tar Dips Are the Best

There is no need for using poisonous dips which are dangerous to sheep and men. The poisonous dips will not stay in the wool long enough or be strong enough to kill the young ticks that hatch out a week after dipping, and as it takes two dippings anyway, and as two dippings of a non-poisonous dip will thoroughly cleanse a flock, there is no reason for endangering men and animals with the poisonous dips. Neither does it pay to make one's own crude dip. The standard coal-tar dips, when properly applied, are cheapest and absolutely efficient.

The underlying principle in the eradication of the tick or the scab is first to kill all the living parasites by immersing the sheep in the dip. Then dip the second time when the eggs that were in the wool are hatched and before the young have grown to full size and have laid eggs again. With the tick, this time is nine to ten days. Any time in the year when the flock is ticky or scabby is the time to dip, but the best time is the week after shearing. The wool is short then and does not absorb a lot of dip. The dip should be heated to a temperature of one hundred to one hundred and ten degrees Fahrenheit, and kept there. Each sheep should be kept in the dip one minute by the watch and the head should be submerged for an instant at least once. The dipped sheep should then be placed in a corral or pasture where sheep have not been for at least two weeks before, so that there will be no live tick or scab mites to crawl on them. Every sheep and lamb must be dipped.

On the ninth or tenth day the flock should be dipped again the same as before. By dipping every sheep and lamb and putting them in a clean corral or pasture, the flock will be free from ticks for all time. Then every sheep that is brought into the flock from other flocks should be dipped twice. If this plan is followed, the flock will always be clean.

### Importance of Dipping Lambs

In using the prepared dips one must follow the directions for the particular dip used, and the water and dip must be measured according to directions, and when it is and the temperature kept up, the dipping will be absolutely efficient.

If for any reason the entire flock that is ticky cannot be dipped the week following shearing, the lambs should be dipped anyway, for soon after the sheep are shorn most of the ticks leave the sheep and go to the lambs. Thus the lambs become badly infested and should be dipped.

But there is really no excuse for a ticky flock. Two good dippings and ten days of carefulness will clean out the ticks for all time, and everyone should have personal pride enough not to have a ticky flock.

PAUL H. BROWN.

Concrete Dipping-Tank

## Breeding for Fall Litters

Sows that are to be bred for fall litters should have their pigs weaned early. Four weeks is about as long as it is safe to let the spring litter suckle. By that time the youngsters will have learned to eat by themselves.

If skim-milk can be furnished them, they will get along very nicely if on a good forage crop. If skim-milk cannot be supplied, some tankage should be fed liberally to the young porkers.

The sows will need rest and an abundance of nutritious feed to prepare them for the second litter. An open pasture with plenty of green, succulent feed, such as clover and alfalfa, is best. As for grain, any of the common feeds rich in protein will do. If corn is the sole grain fed, then some protein concentrate will be necessary. Actual practice has shown that breeding-sows that get a ration high in protein do far better than those whose feed lacks the bone and muscle building elements found in protein.

The sows intended for fall litters should be bred as early as possible in order that the pigs will arrive in sufficient time to get a good start before actual winter comes. It will be found easier to bring sows up to fall farrowing and in better condition than is the case with spring litters. The reason for this lies in the unlimited amounts of green, succulent feed that can be furnished and in the open-air life that is possible for the sows during that time.

H. E. McCARTNEY.

## Finishing Lambs in Corn-Fields

Some of the farmers in southwestern Iowa have adopted a plan for finishing lambs which is proving profitable. When giving the corn the last cultivation in the summer, they sow the ground with rape. This comes on as the corn matures, making a good growth by September and keeping down the weeds. Then they go to the stock-yards at South Omaha and purchase bunches of spring lambs, five hundred or one thousand, or more, as their needs may demand, ship them in on the cars, and turn into their corn-fields to feed. These lambs come to the market from the ranges in Colorado, Wyoming and Montana.

The lambs do especially well during the fall and early winter months in this climate, and are ready to put on the Chicago market by January. They thrive on the rape and other growths of the late summer, and the lower corn-blades. Near the holidays they are finished off with grain, bran and oil-meal. As a rule they need to be fed little grain, as late in the season they begin to eat the corn that is blown down or otherwise falls to the ground.

The manure from the lambs is of considerable value to the soil, and the direct cash profits from this process of finishing have been as high as seven dollars an acre. They do not break down the corn-stalks, and so do not feed upon the corn in the field to any very great extent. Thus the cost of the feed is light, as it is constituted mostly of what would otherwise be waste. Many of the farmers are enthusiastic for this plan, and the practice of finishing lambs in this way is spreading widely.

M. G. RAMBO.

Going Through the Dip

## Bits of Dairy Wisdom

The farmer can grow cheap foods in the summer and convert them into high-priced butter in the winter, and find a ready market; but he must have fresh cows, good shelter and ample food, and all prepared in season.

Don't stop feeding the dairy cows just because they can gorge themselves on green grass. We furnish them with a little grain and roughage right along through the entire summer, and consider that it enriches the milk-flow, keeps the animals in firmer flesh and saves pasturage.

Ten dollars worth of veal may damage your dairy herd one hundred dollars, so save the choicest heifer calves for milch cows, give them extra care and the best of grain and roughage rations, and you soon will notice a marked improvement along this line.

It is really surprising how fast creameries are multiplying, and slowly, but surely, we are getting fast on in this respect by imitating the Danes. If creameries have been good for them, then why not for our farmers?

## Driving "Dont's"

Don't attempt to put the plodding draft-horse on the road, neither put the driver into heavy field-work.

Don't work the medium-sized team all day in the fields, then drive them to town that evening. There is no more reason in that than there is in your walking to town.

Don't expect a colt to respond readily to every pull of the lines, but first let him become accustomed to the new order of things. He isn't used to a piece of iron in his mouth, nor does he understand why he should turn his head first one way, then another.

M. COVERDELL.


# "Scrub" Cream Separators as Unprofitable as "Scrub" Cows

## Advice of a great creamery concern to its patrons

**All Creameries Recognize Superiority of DE LAVAL Cream Separators**

All the big creamery and cream gathering concerns, with their years of practical separator and cream experience, know the great advantages of the DE LAVAL Separators in farm as well as factory separation, and all of them will privately advise the purchase of a DE LAVAL separator, though the competition between them in their own business is so keen that some are reluctant to openly antagonize the agents and dealers handling various makes of other separators.

**Great Omaha Creamery Always Recommends Purchase of DE LAVAL**

The very successful and constantly growing David Cole Creamery Co., of Omaha, Nebr., the general manager of which, Mr. E. S. Snively, one of the most able and best-known creamerymen in the country and for many years previously a Beatrice Creamery Co. manager, never hesitates, however, to come out "square and flat-footed" in favor of the DE LAVAL when asked for separator advice by patrons and those who would become patrons.

**Mistake Not to Purchase the Best Separator, the DE LAVAL**

We have just received a letter of the David Cole Creamery Co., in reply to a Missouri dairy farmer wanting separator advice, from which we quote the following instructive paragraph:

**"We believe the DE LAVAL is the best Separator made. We feel that anyone wishing to purchase a separator makes a great mistake unless he purchases the best machine on the market. No one can make a success of dairying by continuing to use scrub cows. Neither can he make a success of dairying by using scrub separators."**

**Sound Advice to Separator Buyers**

That's the soundest kind of sound advice, by the giving of which the David Cole Creamery Co. is saving many thousands of dollars to its patrons as well as insuring to themselves a better quality of cream capable of producing a higher quality of butter, and the results show that month by month they are able to get more and better cream by telling the whole truth about separators to anyone who seeks it.

**Safe Rule for Cow Owners to Follow**

"No scrub cows and no scrub separators" is a rule every dairy farmer may wisely apply to his dairying, and be certain to derive profit and satisfaction from doing so.

We can't furnish the cows but WE CAN FURNISH THE SEPARATOR, and shall be glad to supply any desired information regarding the "World's Standard" DE LAVAL.

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# The Sherman Act in Action

## By Judson C. Welliver

We waited two or three years for the Supreme Court to tell us whether the Standard Oil and the Tobacco Trust were good or bad. Then the court told us they were—unreasonable. We looked pleasant and took the court's word for it.

Most of us did, anyhow. All of us will, so far as concerns practical effects. It is a fine testimonial to the capacity of this people for intellectual discipline, that it can agree upon nine men as arbiters in such a case, and abide by their decision. That is the kind of discipline that means real progress; the progress that makes for civilization and enlightenment.

This thing of getting a people disciplined is very wonderful. The Japanese were untainted of western civilization two generations ago, yet they subjected themselves to discipline and mustered the armies that won those great battles on the plains of Manchuria. But that is not the sort of discipline I am talking about. I am trying to distinguish between physical discipline and moral discipline, as you might draw a line between physical courage and moral courage. Moral courage seems to me a thousand times greater attribute than mere physical. Moral discipline, likewise, surpasses physical discipline—the capacity to keep step and refrain from shooting till you see the whites of the enemies' eyes.

The fight against monopoly is so old that nobody knows when or where it began. Two hundred years ago they made laws in the colonies to control the fee that might be charged for a night's lodging, or the crossing of a stream at a convenient ferry; they enacted a regulation concerning the price of a loaf of bread. We don't find that necessary nowadays because other economic forces have taken control, and dominate those things.

### The Gains of Monopoly

Instead, we find that other matters have become more worthy of our attention. We legislate that gas shall be sold at seventy-five cents per thousand feet, that passengers shall be carried at two cents per mile, that state or interstate commissions shall fix maximum rates to be charged for hauling freight. In short, as we discover particular processes of a public nature, we legislate to control them. We no longer cumber the law-books with acts about ferriage charges or the price of a loaf, because nobody uses the ferry, and competition has fixed the price of bread. But meanwhile the ferry's place has been taken by the railroad; and we legislate for it.

The race between the law and the public interest has been an interesting contest for many generations. The English decisions on monopoly a thousand years ago abound in fine examples of reasoning that would do credit to a court of to-day. The problems were marvelously similar.

But something over a hundred years ago James Watt dreamed about the steam lifting the lid of a tea-kettle; and that led him to make a steam-engine. A generation later, Stephenson got the notion of making this steam-engine draw carriages; Fulton had already applied it to boats. Then began that centralization of industry which in the last few decades has caused monopoly to make immense gains. It has put the contest into a new phase. It brought the factory system, the huge "plant," the great organization, the corporation, the centralization of control, the opportunity of the merchant prince, the great manufacturer, the railroad king, the empire-builder.

### The Public Servants Become the Masters

People became willing to put their individual capital into corporate aggregations, because the state gave certificate of character to the corporations, chartered them, endowed them with something of its own overshadowing powers. The thing became "safe." But beyond that was the huge fact that production was cheaper by this method. Machinery and steam-power and a great coöperating organization could make shoes or flour or transportation cheaper than separated individual effort could make them.

So the corporation came. It made things cheaper. It was a public servant, and a public necessity. After the discovery was made that one hundred men could make two hundred pairs of shoes, coöperating with machinery and capital, as cheaply as they could make one hundred pairs of shoes working independently, how much chance did the old process have? None, because people needed shoes as cheap as possible. As in the case of shoes, so with the railroads. Time was when a score of little, local railroads must be used to ship goods from Albany to Buffalo. Commodore Vanderbilt bought them all in and established a single through route. It did the business better and cheaper. It made him, incidentally, a multimillionaire.

So far so good. Apply that shoe argument and that railroad illustration to the whole field of human enterprise, and you have a statement of the forces that have been making for consolidation of industry.

### The Benefits Are Not Distributed

Nobody objected. It looked good for the people as a whole, and it was good. Where is the farmer who would go back to the flail and the cradle in order to get rid of the Harvester Trust?

The whole community has accepted that it is good business to coöperate. It is obviously economical. But in concentrating attention on the producing side, on making things at less cost, the community has lost sight, until comparatively recently, of the necessity to give everybody a fair whack at the new cheapness. If you discover a way to make shoes for forty cents a pair, which are now costing two dollars, I ought to get my shoes for less than two dollars. If you hold me up for the same old price and pocket the $1.60 profit, it does me no good. If you control this forty-cent method so completely that you make all the shoes, and still pocket that $1.60 profit per pair—then the community gets no benefit. You will make a fine pile of money. So did the Standard Oil Company. You will seek investment for it, and presently will be deep in all sorts of other things besides shoes. So are the Standard Oil men. In time the rest of us will be working for you and other enterprising people who have developed these means of surrounding the benefits of cheaper production. As likely as not, we will not be pleased with the arrangement.

### The Community's Authority is Unquestioned

The people of the United States are in that position, in a general way, and not pleased with it. They are figuring, right now, on means to secure for themselves a larger share of the benefits of cheaper production. It's all a question of distributing benefits. There is no question about the benefits. The difficulty is that too few people absorb too big a share of them.

Modern monopoly is founded on the idea of doing some service in cheapening the production of things. Ancient monopoly was not. Ancient monopoly was mere monopoly; modern monopoly, under the factory system, has its useful social side. But it is developed altogether in one direction. It runs to the notion of making them for less cost, but of selling them as nearly as possible for the former price. The people in control of monopoly want to gather in its benefits in higher profits; the people who must buy from monopoly, want to get its benefits in cheaper goods. There is the irrepressible conflict.

The question, then, is whether we want to harness up these instruments of cheaper production, so that they will pull for all of us and give us all a fair share of benefits; or do we want to destroy these means of cheapening production. Of course, everybody is for keeping the improved machinery and working out a way to make it serve all of us. How will we do that?

It seems to me that the way lies in giving as much attention for a spell to developing equitable means of distribution, as we have been giving for a long time past to organizing these cheaper methods of production. We have accomplished a good deal in the way of establishing the public's right to a square deal in distribution. We have established, for instance, that there is a public right to regulate the cost of public service. Nobody questions the community's authority to fix the price of electric-light, water or gas in a city. Nobody doubts the reasonableness of the community fixing passenger rates on a railroad, or freight rates for all the railroads. We look upon these things as public service facilities. Which is very well, so far as it goes. But when one corporation controls the entire supply of tobacco or oil or sugar, and undertakes to dictate the prices the rest shall pay, why is it not just as reasonable to have the community step in and fix the prices of tobacco, oil, rubber or sugar as to have the community fix the prices of gas, passenger fares, electricity or freight haulage? What is the essential difference?

We used to rely on competition to do these things for us; but competition has fallen down at its job. It doesn't do it, because the promoters trustify the competitors, and there is no chance for competition left. Then it is up to the community to regulate.

Mind you, I don't imagine that the community is going soon to legislate that sugar shall sell at four cents a pound, or steel rails at twenty-two dollars a ton, or anything of that sort. There are indirect ways of doing it. These at least are entitled to be tried out thoroughly.

There should be good and effective laws that would limit capitalization to actual investment plus cost of promotion. Other countries have most elaborate codes of this sort. Our own states have in some cases gone far toward such regulation.

Take the Sugar Trust. It has $100,000,000 capitalization. It pays seven per cent. on that amount. But it hasn't anything like $100,000,000 of actual property. It controls the beet-sugar industry and is fast getting control of all available sources of cane-sugar—Hawaii, Porto Rico, the Philippines and Cuba.

Suppose we provided first that it must not control all these competing elements; it must be disintegrated and competition restored to its opportunity of keeping prices and profits down to reasonable limits. It would be carrying out the public policy as laid down in the Sherman law. There is no reasonable doubt that the people are for the Sherman act. It has been twenty-one years on the books, and time and again efforts to change it have failed.

### The Restoration of Individual Enterprise

To go back to the Sugar Trust. Suppose it be dissolved, and then suppose that we provide that hereafter it may earn only a reasonable rate on actual investment. In the Consolidated Gas case, the Supreme Court was of the opinion that seven per cent. was a fair rate for a public service corporation to earn. Giving seven per cent. on actual investment, and forcing dissolution of any combination that grows so big as to make competition impossible, would go a long way toward prevention of extortionate prices, would give competition a chance within reasonable limits without depriving us of the benefits of big organization; and would restore an opportunity for individual initiative and enterprise.

That is the road on which we seem to have entered. It is not such a revolutionary thing, when you think of it. We have done these things to the railroads—and it helped rather than injured them. We have done them in part to public service corporations in cities.

We are not going to destroy the benefits of cheaper production, and on the other hand we are not going to let the few garner all the fruits from this cheapening of production. We are going to make the big aggregates work for both their owners and the public.

You can study over the financial facts about the great industries, and in the light of the Tobacco Trust decision you can pretty nearly tell what ones are going to have trouble when they get to the Supreme Court. It is not a short list, either.

### The Sherman Act and the People

But the "trouble" is not going to mean destruction. It is going to mean restoration to a new basis. Property rights are going to be protected. Honest investors are going to be better off in the long run, for there will be greater stability of values and more freedom from dishonest manipulation. The public is going to get its slice of benefits from cheaper production.

There will be endless talk about more legislation; but there will not be legislation to interfere with the Sherman law, for many years. Congress is going to let that law work out its own course. The law never was more popular with the mass of people than right now, in the light of these two decisions. There is just about as much chance to revise and improve the law of gravitation next session as there is to do anything vital to the Sherman act. After waiting twenty-one years, the Sherman act has started working. We will see it saw a lot of wood in a few years. And it isn't going to saw off the arms and legs of bystanders, either.

# The Awakening of Ezra

## An Interesting Story of a Small Boy's Conscience

By W. S. Jennings—Illustrated by Mina Iwanek

EZRA was replanting corn. He had been at this task ever since the young shoots had gotten through the ground far enough to show where they were and where they weren't, and that had been for an age, or at least it seemed so to Ezra. He had begun on this field with the hoe when the hired man began with the corn-plow, and so long as he could keep up and follow along behind, all went joyfully; but when the sun got higher in the sky and became hotter, the clods began to get hard, and Ezra stopped often to rest his bare feet. Thus he fell behind; at first it was only a few yards; then he lost an entire row, then two rows, and so on, until now the hired man was away down at the lower end of the field where the ground was wet and the weeds were thick, and the boy was all alone. The short hoe grew very heavy and the bag of corn which hung at his side was by no means light. The sun beat down on the big straw hat and shimmered up from the hard, white clods in little undulations of heat that parched and burned, until it seemed that the whole landscape was aglow.

### Ezra Begins To Lose Interest

Altogether, replanting corn was getting to be a very distasteful occupation for Ezra. Everywhere that a hill of corn was missing, a cutworm had been at work. Ezra thought that there must be an army of cutworms at work in this particular field. At every such place he must dig a hole, drop in five grains, cover it up and pat it down with the hoe; a long process for a boy who liked to have things over with quickly. The hoe made more infrequent and desultory attempts upon the hard earth. The bare feet trod more gingerly. The pair of brownie overalls that enveloped Ezra's small form seemed to have a tendency to move very slowly, indeed.

After all, what was the use? Down in the new ground, by the woods, the crows were excitedly cawing and flying about, all noisily trying to talk at once, for all the world like the women who came to help his mother at threshing-time. Ezra knew that as soon as the hired man drove out of the corn-field the crows would come down to dinner, and there would be a lively scratching and pulling up of young corn, and then—more replanting. Altogether, life began to take on a most serious aspect for Ezra, and being at the end of a row, he sat down again to think it over.

Ezra, being young, had never heard of the saying, "he who hesitates is lost," or perhaps he would never have hesitated, and I would have had no story to tell. At any rate, he hesitated to think it over, and, while he was thinking, down the road in a cloud of dust came the Tempter. To be sure, he came, not in a fearful form for a Tempter, but he was a Tempter just the same. There were two of him, and each one wore brownie overalls and a straw hat and blue-and-white-checked shirt, and kicked up clouds of dust with bare toes turned carefully upward to avoid hidden stones. Not a fearful form at all, but the Tempter himself knows best what form catches small boys.

### The Tempter Sent Away

Ezra, seeing the cloud of dust, recognized at once what was in it. So he climbed to the top rail of the fence, where he sat astride and waited. "Hullo, fellers," he said, as the two stopped before him.

"Hello, Ez, what *you* doin'? Replantin' corn?"

"Naw, ridin' my airyoplane; want to get on?"

The Tempter vouchsafed no retort, nor ventured to mount the unknown steed, but continued: "We're goin' over to Blue Hole. It's too nice to work. Better come on."

"Humph-umph," was Ezra's uncompromising reply.

"'Fraid you'll get a lickin' if you go along with us?"

"Nope."

"Then why don't you go?" persisted the Tempter.

"Would if I wanted to," said Ezra. "Don't want to."

"'Fraid cat, 'fraid cat," sang the Tempter, and passed on down the road.

Ezra sat astride the rail as if that were his sole purpose in life until the Tempter was out of sight. Then he slid slowly to the ground and picked up his hoe and corn. He started to work with renewed determination. But the Tempter's work had been well done. Ezra's determination dwindled rapidly until he hesitated again and, hesitating, was lost.

He looked carefully about. The hired man was not to be seen. No one would ever know. Boiling sun, crowds of crows, hard clods, all forced themselves upon his consciousness and added their efforts to the taunts of the Tempter to make him desert his post. Being human and only a boy, he yielded.

With sudden and awful resolution, and with a terribly beating heart, he took corn and hoe and climbed over the fence into the road. On the other side of the road was a line of post-holes where the hired man had been at work in wet weather, preparing to build a new wire fence. Ezra found a particularly deep hole, and here a whole bag of corn was planted, all at once. He covered it with earth and rolled in a big stone to prevent inquisitive chipmunks from revealing his secret.

Now, Ezra felt, he had obeyed in letter, if not in spirit, the paternal law, which had been laid down at the breakfast-table thus: "When you get that bag of corn planted, you can go swimming, and not before. But don't you put more than five grains in a hill."

Ezra was quite sure that he had obeyed the law, for nobody ever heard of calling a post-hole a hill, and nothing whatever had been said about post-holes. People much older and wiser than Ezra have been known to quiet their consciences in much the same way as this.

### Swimming at Blue Hole

Down at Blue Hole a big sycamore leaned far out, shading the pool. That was why it was such a good swimming-hole. You didn't get your back sun-burned in Blue Hole. The small boys who were splashing noisily there suddenly knew that someone was arriving. A long yell announced his coming, and, looking up, they beheld Ezra crossing, at a run, the wide patch of bluegrass that bordered the creek. He wore a look of supreme happiness and—that was all. The hat, shirt and overalls were in his hand. Ezra was economical of his time—at times; besides, a boy who couldn't undress on the run didn't have any business to be swimming with Ezra's bunch. Flinging his clothes in the air, he ran right out on the big sycamore with his own war-whoop (every boy has his own), and pausing only to balance a moment, and to utter the prelude of every dive, "Here goes nothin' after sumthin'; look out, fellers," he dived with sprawling limbs into the pool.

Everybody had to go to church and Sabbath-school on Sunday afternoons. Everybody, that is, excepting the hired man. On this particular Sunday afternoon the hired man strolled out to view his work on the new fence while the folks were away. But Ezra sat in the pew between his father and mother, and, as usual, prepared to go to sleep.

To-day, however, he was destined not to go to sleep. The very first words of the preacher, after he had wiped his spectacles and opened his big Bible, caught the boy's attention and made him very wide awake, indeed. After announcing the chapter and verse, the preacher read with great emphasis, "But if ye will not do so, behold ye have sinned against the Lord: and be sure your sin will find you out." And then, removing his glasses and looking slowly over the audience until his eyes fell exactly on little Ezra, or at least Ezra was sure they did, he repeated slowly, "Be sure your sin will find you out."

"Ezra sat astride the rail . . . until the Tempter was out of sight"

### Ezra is Conscience-Stricken

At first Ezra was very much frightened. He glanced about involuntarily for the sheriff, a personage whom Ezra had always connected inseparably with sin, and of whom he was terribly afraid. But the preacher went on talking, and Ezra went on listening. He looked out of the window. He made a face at the baby on the seat in front, but he could not help hearing every word that the preacher said. Always, he had the guilty consciousness of that bag of corn, hidden away in the post-hole. The bag which everybody thought he had carefully planted. He had thought of that matter as ended, but "Be sure your sin will find you out" the man had said. It made Ezra terribly uncomfortable as he wondered what people would say when they found him out. Finally the preacher said, "And lastly, Beloved," and closed the Bible. Ezra heaved a sigh of relief. An awfully big sigh for so small a boy.

### A Hair-Raising Story

But the worst was yet to come, for, by way of proving finally and without question that your sin *will* find you out, the preacher began to tell a story. A story of a murderer who hid the body of his victim under a great pile of leaves, and the wind blew and blew, and blew the leaves all away. Ezra listened with open mouth and big, fear-stricken eyes. And when the murderer took the body again and sunk it in the river, and the river dried up, he shuddered and moistened his lips. And then when the murderer took the body again and hid it under a big pile of stones, and an earthquake came and tore them away, the boy gazed in horrid fascination at the preacher, but cast guilty glances from side to side at his parents. No one in that audience knew so well as Ezra just what agony of remorse that murderer experienced, although the preacher's description was as vivid as old-fashioned theology could produce.

When the service was over, the preacher did not shake Ezra's hand at the door as was his custom, for the boy had slipped out at the side door, braving his parents' displeasure. He knew he could never face that accusing look. He would drop dead if he had to do that. And so he ran down the road to his home as fast as his short legs could carry him, which was very fast, indeed.

### Making Things Right

When the moon is shining real bright, you *can* distinguish young shoots of corn in the field if you try. That is, you can make a very good guess as to where they are and where they aren't. The big stumps made fearful shadows, and a screech-owl in the deadening made the most doleful and ghostly noises. And in Ezra's excited imagination every stump hid a murderer, and every screech of the owl was the wail of a dying soul. But Ezra's determination was great when aroused, and he was determined to atone for his sin before it was found out, even if he was murdered in the attempt. It had taken some terribly hard digging to get that stone out of the post-hole, and as Ezra went with feverish haste up and down the long, moonlit rows of corn, he dropped perspiration with every grain, until the last grain was planted.

Never before had he been out as late as eleven o'clock at night, and so he did not know that the hired man smoked his pipe on the back porch at that hour. As he slipped quietly up the steps in order to waken no one, he ran plump into that individual.

"Purty big stone in that hole, sonny; how'd ye ever get it out?" inquired the hired man with a grin.

"Dug it out," said Ezra shortly, and passed on up to bed. [THE END]

## The Lady of the Golden Pen

TO ME she was simply an ordinary, middle-aged acquaintance, until upon finding myself far from home and crushed by a great trouble, I received a letter from her—and such a letter! Filled with simple home happenings, and exhaling a nameless strength and fortitude and sympathy, yet never touching the sore, bruised places. I sent back an immediate, heartfelt reply, and from time to time received other priceless communications until the trouble was lifted. If any unusual happening occurred in my life during the years following, I was certain of a cheerful, helpful letter from this now dear friend. By chance I learned of others who had received the same attention and the same helpfulness from her. After many years, opportunity offered me the chance to question her, and I could not forbear.

"It has been so wonderful to us all how you could do it," I said, telling her of the great help her letters had been.

She flushed with pleasure and self-consciousness.

"My dear," she answered, "I believe it is the duty of everyone to make the world a little better for having lived in it, and I believe there is some special gift given each of us with which to accomplish this.

"From a child I was possessed with an absorbing desire to write, but circumstances played me false—my parents were too poor to educate me, and I lacked the physical endurance to do this for myself. So I grew up to be a very ordinary young woman, without accomplishments or beauty. But everyone liked my letters!

"One day when I was feeling a little bitter to think of my uncultivated ability, I suddenly realized how I was 'hiding my talent in a napkin.' I resolved to send a cheerful message to at least one person every day—to some person especially needing it.

"In a little blank book I made out a list; first the nearest and dearest home people who all too frequently are neglected, but who hunger so eagerly for news from the loved ones. Then followed my 'permanent list' of aged persons, invalids, and motherless girls and boys who like to feel someone is interested in them. From time to time, as I heard of acquaintances having a particular joy or sorrow, I put down their names for a season.

"Nothing but sickness in my immediate family has been allowed to interrupt this custom. Sometimes there is time only for a card, but the remembrance is there, and I sleep better for the thought."

The stationery was inexpensive, the writing quaint and irregular, but never were letters more welcome. We lovingly called her "The Lady of the Golden Pen," and indeed she seemed to be inspired with kindly, helpful thoughts. And only since her pen has been laid aside do we fully appreciate her unfailing interest.

One need not be a genius to send out this bit of daily cheer—the chief requisites are a sympathetic heart and a generous thoughtfulness for which we all ought to be striving. A letter means so much to the dear old mother and father, the shut-in whose constant companion is bodily suffering, the homesick boy and girl; yet how often we put off its writing from day to day. Would not a very little personal sacrifice gain for us "a golden pen" and a place in the hearts of our fellow creatures?

ALICE M. ASHTON.

## About God's Gifts

By Rev. Charles F. Weeden

WHAT am I made for? This is often a perplexing question. So contrary do affairs appear, so far away seems life's ideal, that in the grand and mighty tide of events we are like a mere leaf or grain of sand tossed hither and thither, blown over the field and whirled down the road with apparently no object in life and of little use. Yet we feel that there is some place in the great world for us. Nothing is useless. There must be one leaf to cover a beautiful tree with many leaves; an aggregate of sand-grains builds a towering mountain, the sum of tiny flakes banks the country in snow.

Besides a place, there is a reason for everything. Men forget to think and get careless about life. Our Lord, when He worked among men, taught in the parable of the ten virgins the danger to those who took life too easy. In the parable of the "Talents" He shows the peril of neglect because we think life is too hard. He likens the kingdom of heaven to a lord going into another country and delivering his goods to his servants according to their several abilities. We use the word talent in two different senses: The talent of the parable was money worth, in Attic silver, about $1,200. It was, therefore, of great value. We also use the word talent as measuring natural endowments, as a gift for music, for carpentry, for business, for farming. As the lord of the household gave talents of silver, so the Lord of heaven has given talents of body, mind and spirit for his servants to use. There is the obligation on men's part to act as best they may according to their ability. We are all then represented in this parable of the ten talents. First, there is the

### Person of Marked Ability

It is undoubtedly true that God has bestowed upon some a larger share of natural ability than upon others. We should not be jealous, but cautious here. Let us recollect two things: that the natural ability of another came into usefulness through severe discipline, discipline apportioned to the gift, and that when much ability is given, a great work will be required. He that received the five talents was to gain not one, but five more. Edison is an untiring worker as well as a man of genius. He experiments in his laboratory day and night without food or sleep. We can never estimate of ourselves the capacity God has put into our being. A farmer once showed me with just pride wood that he had piled perfectly square. I could not have done it. It was his ability. I recall, too, as a city-bred young man, having heard of "hills" of corn. Later I built little hills of soil in my parsonage garden and planted therein the kernels of corn. My neighbor and senior deacon happened along and with the toe of his boot (and a smile) demolished my "corn-hills," much to my dismay. He knew how to plant, and I did not.

Real worth is unconscious of its noble deeds. They are performed from very necessity and in all modesty. No one can use the ability given him and not feel the pressure to use it to the uttermost. The obligation is never lessened. A senator will have more at stake than a cowboy—both are in duty bound to do their best. The measure of our faithfulness is in doing the utmost in our power. God will never give us more than we can do. He will never be satisfied with less than we can do.

Then there is the

### Person of Moderate Ability.

He did not stop to complain that his lord had given him but two talents, but trusted the wisdom of his lord that he would give him all that could be cared for. God takes all things into account. There is stimulus in the varying degrees of excellence. If all could do the same thing equally well, life would be tame. Fair rivalry is healthful. You may not have a Webster's fifty-six-ounce brain, but you have a mind that will do wonderful things in its own way and sphere. Believe in yourself. Respect yourself for what God made you. Keep yourself at your best. There is no disgrace in honest defeat. Genius is in working harder than ever after failure. At every earnest endeavor toward high aims and right purposes character grows stronger. Do the little well and more will be given. Every life is a plan of God. Our calling is where we can do our best.

There is much significance in the fact that these two faithful servants at once made use of their lord's trust. The use of the two talents was just as important in the eyes of the lord of the servants as the five talents. The reward is the same, "Well done. I will set thee over many things." God requires of His children that they be faithful, not profitable, servants. In the third place there is the

### Person of Little Ability

This is the most dangerous class of all. President Taft evidently has his job before him, but the path is not so clear in humbler life. Some shrink from work and duty and call it modesty, when really it is nothing but laziness or lack of interest. You rarely hear busy people complaining that life is too hard. Not if our ambition is moderate. It is always the one who has little to do who finds lions in the way. Great work coins great men and promotes industry. Probably the one-talented man did something, but in other directions than his lord had bidden him. Neglect is self-direction, and self-direction is sure destruction. Our safety is in seeking divine guidance. It will not do to hide our talent in the world any more than it will to dig in the earth, bury our gold and expect an increase.

Finally, the real trouble lies deep. The parable teaches that "good times" are not so much needed as that men shall understand that the successful life is in

### Service for Christ

Here is truly the noblest employment of our talent. The neglectful servant was charged with slothfulness not because he was not busy in the world, but because he was not busy in his lord's work. To be a Christian is the safeguard. No amount of Christianity will ever make one a Marconi. Nevertheless, you may do some things that the greatest inventor or philosopher or scientist may never do. Talent for doing good is the best of all. In brotherly service for our fellow men is the realization of the highest talent. How can I be fair toward my neighbor and helpful to him? This is the way God would have his children occupied on earth. Some ask, "Have I any talent at all?" Of course, you have. Everybody has, only some have buried it. Enterprise and industry will discover a lot for you. But to be like Christ is to realize the value of your gift and to bring it to light. Imitating Him, we are employing the gifts which God has given to their full extent. Our natural ability will be of permanent usefulness and blessing when we employ it through prayer and Christian principles. If you do not clearly recognize any good that you are doing, all the better. It were well that all our good deeds, our helpfulness, be done unconsciously and so unselfishly. For the Christian the parable is one of encouragement. "My little gain for the Master? What can I profit Him?" Obey Him. Trust Him, love Him! In His hands our service is magnified. The Christ-follower has not one talent, nor two, nor five, but talents a hundredfold!

## The Sin of Jealousy

By Charles Henry Prather

THERE is a bird in the jungles of Africa called the "Prison Bird," which is the most tyrannical and jealous of husbands. Mr. Livingstone watched the bird's habits while in Monpour, and in his subsequent observations referred to the nest as a prison and the female bird as an imprisoned slave.

The nest is built in the hollow of a tree through an opening in the bark. As soon as it is completed, the mother bird enters carefully and fearfully and settles down in it. Then papa walls up the opening, leaving just space enough for air and food to pass through. He keeps faithful guard and brings food at regular intervals without fail. The female thrives under her enforced retirement. But if the "Prison Bird" is killed or in any other way prevented from fulfilling his duties, the mother and her little ones must die of starvation, for she cannot free herself from the bondage.

Normally the imprisonment lasts until the chicks are old enough to fly. Then the male bird destroys the barrier with his beak and liberates his family.

Jealousy is the most tyrannical of all sins, and would build prison walls around loved ones when there is no reason for it. And, too, it is the sin that makes us miserable when there is no occasion for being so.

## The Victory That Counts

By Harriet Whitney Durbin

"WELL, I got the best of it!" Whenever this or a similar exultant boast is thrust upon us by some recent participant in a spirited battle of tongues, somehow we feel moved to inquire in what sense the boaster has "got the best of it."

You can be sure he never got the best of it in any right sense. Did our friend wind the battle by superior strength of lung and the ability to "floor" his antagonist by overpowering vehemence of language? Did he "get the best of it" by offering strenuous argument and hammering it in with a force that left his opponent gasping and too bewildered to discover the weak spots in the other's armor? Did he triumph by convicting his adversary of imbecility, by flouting him and flinging at him such barbs of wit as incited others to join in the ridicule? Or, did he "get the best of it" by the agency of reason, persuasion and moderation, and through the gentle potency of the soft answer that turneth away wrath—the kindly concession that allows an opponent as full liberty and latitude as one assumes for himself?

In other words, did our friend get the best of it by winning a victory over himself? If so, his claim is well grounded and he has a right to his triumph. "He that is slow to anger is better than the mighty; and he that ruleth his spirit than he that taketh a city." Well might we all blazon the proverb upon our life-banner and strive to live up to its grand lesson. The man who can so truly rule his spirit as to maintain his tranquility during an earnest controversy, neither seeking to goad his antagonist into absurd fury, or allowing himself to be stung to discourteous retort and personality, keeping in the golden way of justice and moderation, may well claim that he has the best of it. for he has won the hardest of victories—the victory over self.

## Keep A-Smilin'!

STILL a-smilin', my good brother?
That's the way through life t' go.
Keep a-laughin', don't y' worry,
An' dull care won't have a show.
Check your trunk for Sunshine Country
Where old Trouble never stays
An' you'll help th' world be merry
While y' live through happy days.

Keep on dreamin', it won't hurt y';
Let th' world know you don't care
Though the wild winds rage an' ruin
All your castles of the air.
Sing your song—if it's a sad one
Better sing it mighty low,
But if there is sunshine in it
Lift your voice and let us know.

Don't quit hopin', it will bring y'
All y' need an' plenty more.
He who works an' keeps a-smilin'
Finds life sweet unto th' core.
S'pose th' clouds do hide th' heavens?
Can't have blue skies all th' while;
Got t' use th' clouds for somethin';
Y' won't mind it if y' smile.

If y' feel bad, just remember
There's a heap worse off than you,
But they smile an' keep on hopin'
An' their days are never blue.
What's th' use, friend, o' complainin'?
It won't get y' nothin' good.
While you'll sure be well an' happy
If y' smile an' saw your wood.

—John Nichols Beffel, in National Magazine.

* * *

Do your work as well as you can, and be kind.

The heights by great men reached and kept
Were not attained by sudden flight;
But they, while their companions slept,
Were toiling upward in the night.
—Longfellow.

A trouble either can be remedied or it cannot. If it can be, then set about it; if it cannot be, dismiss it from consciousness, or bear it so bravely that it may be transfigured to a blessing.—Lillian Whiting.

Put this up in your memory—that Nature abhors the credit system and that we never get anything in life till we have paid for it—anything good, I mean; evil things we always pay for afterward and always when we find it hardest to do it.
—James Russell Lowell.


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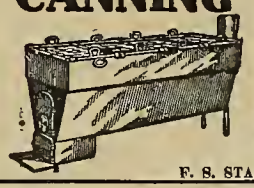

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# Choice Recipes for Your Cook-Book

In the spring and summer nothing is more welcome or appetizing than a tempting salad with a good salad dressing. Below are some splendid recipes for making salads and salad dressings:

**To make French dressing,** mix three fourths of a teaspoonful of salt, one fourth of a teaspoonful of pepper, two tablespoonfuls of vinegar and four tablespoonfuls of olive-oil, and stir until well blended.

**Mayonnaise Dressing**—Mix one teaspoonful of mustard, one teaspoonful of salt, one teaspoonful of powdered sugar and a few grains of cayenne. Add the yolks of two eggs and stir until thoroughly blended, then add one-half teaspoonful of vinegar. Add olive-oil gradually at first, drop by drop, and stir constantly. As the mixture thickens, thin with vinegar or lemon-juice. Add oil and vinegar or lemon-juice alternately, stirring or beating constantly, until two tablespoonfuls, each, of vinegar and lemon-juice and one-and-one-half cupfuls of olive-oil have been used. If the oil is added too rapidly, the dressing will have a curdled appearance. A smooth consistency may be restored by taking the yolk of another egg and adding the curdled mixture slowly to it. Olive-oil for the making of mayonnaise should always be thoroughly chilled. The utensil used in the making of mayonnaise may be a silver fork, wire whisk, or Dover egg-beater.

**Oak Hill Salad**—Cut cold, boiled potatoes in half-inch cubes; there should be two cupfuls. Add one-half cupful of finely cut celery and a medium-sized apple, pared, cut in eighths, then the eighths cut in thin slices. Cover with French dressing, arrange in a mound and garnish with celery-tips and sections of a bright red apple.

**Brunswick Salad**—One-and-one-half cupfuls of finely cut celery, one cupful of nut-meats, broken in pieces, and one cupful of shredded cabbage, mixed and moistened with boiled dressing. This salad may be served in a salad-bowl made of a small, firm, white cabbage.

**Boiled Salad Dressing**—Mix one-half tablespoonful of salt, one-half tablespoonful of mustard, three fourths of a tablespoonful of sugar, one egg, slightly beaten, two-and-one-half tablespoonfuls of melted butter and three fourths of a cupful of thin cream. When thoroughly blended, add very slowly one fourth of a cupful of vinegar. Cook in a double boiler, stirring constantly until the mixture thickens slightly, then strain and cool.

**Some Omelet Recipes**—Both French and puffy omelets admit of many variations. Remnants of chopped, cold, cooked chicken, veal or ham may be folded in just before the turning, or grated cheese may be added. Cooked peas, asparagus or cauliflower may be added to a white sauce and poured around the omelet.

**For a puffy omelet,** separate the yolks from the whites of four eggs. Beat the yolks until thick and lemon colored, and add one-half teaspoonful of salt, a few grains of pepper and four tablespoonfuls of hot water. Beat the whites of four eggs until stiff and dry, cutting and folding them into the first mixture until they have taken up all the mixture. Heat an omelet-pan and butter the bottom and sides with one tablespoonful of butter. Turn in the mixture, spread evenly, place on the range where it will cook slowly, occasionally turning the pan that the omelet may brown evenly. When well "puffed" and delicately browned underneath, place the pan on the center grate of oven to finish cooking the top. The omelet is done if it is firm to the touch when pressed by the finger. Fold and turn on a hot platter and pour around one-and-one-half cupfuls of white sauce.

**Even experienced housekeepers** often find it difficult to fold and turn an omelet successfully. Hold the omelet-pan by the handle with the left hand. With a case-knife make two half-inch incisions opposite each other at right angles to the handle. Place the knife under the part of the omelet nearest the handle and tip the pan to nearly a vertical position. By carefully coaxing the omelet with a knife, it will turn without breaking.

**German Omelet**—Mix smooth a small teaspoonful of flour and one of corn-flour with a tablespoonful of cold milk or cream and stir into the well-beaten yolks of two eggs, pour on one-half cupful of boiling milk, sweeten slightly and flavor with a few drops of vanilla. Then fold in the stiffly beaten whites of the eggs, pour onto two buttered pudding-plates and bake in a quick oven until set. Fold and serve on a hot dish with sugar sifted over. These may be made like savory German omelets by substituting for the sugar salt and pepper, and adding a little chopped parsley.

**Delicate Omelet**—Cook one teaspoonful of corn-starch in one-half cupful of milk, remove from the fire and season with salt and pepper and a small piece of butter. When cool, add the well-beaten yolks of three eggs, then fold in lightly the stiffly beaten whites, turn into a hot, buttered spider and set on top grate of oven a few minutes.

**Some Good Fritters**—A good rule for fritter batter is two eggs, one cupful of milk, one teaspoonful of salt and two cupfuls of flour. If wanted very light, add a little baking-powder. Mix quickly and beat thoroughly. If made an hour before using, the batter will be better, as the grains of flour swell by standing after being moistened, and thus become lighter. The whites of the eggs and baking-powder, if used, should not be added until just before using. The oil in which fritters are fried should be smoking hot. Test by dropping a teaspoonful of the batter into the oil—it should rise at once in a puffy ball.

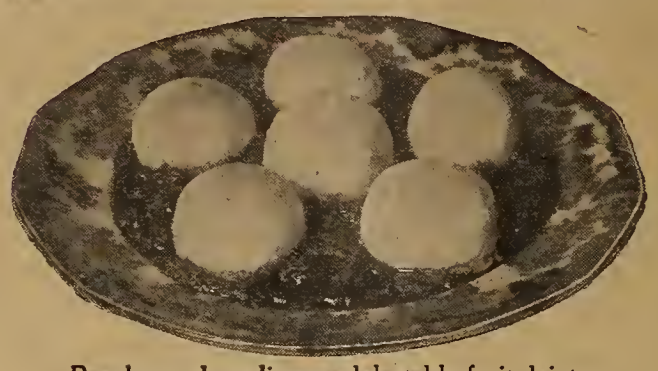
**Berry Fritters**—Any fresh berries, or even canned ones, may be used in fritters by stirring one cupful of the berries (well drained, if canned ones are used) into one-and-one-half cupfuls of the batter. Drop by spoonfuls, when well mixed, into hot oil, and fry as usual.

**Rice Fritters**—Boil one cupful of rice in one pint of milk until soft and the milk is absorbed, then remove from the fire, add the yolks of three eggs, one tablespoonful of sugar and two tablespoonfuls of butter. When cold, fold in the stiffly whipped whites of the eggs, drop by spoonfuls into hot cooking-oil and fry a deep buff color. Serve with lemon or cream sauce.

**Tomato Fritters**—One pint of finely chopped and well-drained tomatoes, add one-half cupful of sweet milk, one teaspoonful of salt and one teaspoonful of baking-powder, sifted in one pint of flour. Beat all together thoroughly, drop in spoonfuls on a hot, well-buttered griddle, fry brown on both sides, and serve hot.

**Banana Fritters**—Peel the bananas and cut them in slices one-half inch thick, dust with powdered cinnamon and dip in the batter; fry in hot cooking-oil and serve with syrup.

**Raspberry Dumplings**—Either bread or biscuit dough may be used for these fruit dainties. Let the dough rise till light, if bread sponge is used, then shape in balls. Let rise again and brush with butter. Arrange in a baking-pan, pour



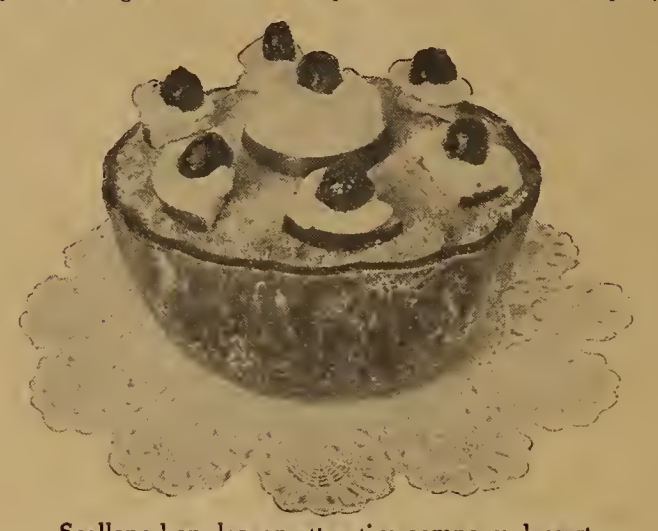
Raspberry dumplings, a delectable fruit dainty

crushed raspberries around them and bake. Biscuit dough may be mixed quite soft and dropped in spoonfuls on the fruit. Serve hot with sugar and cream.

**Butter Cake (Butter Kuchen)**—This is a tested German recipe. One solid cupful of butter, two cupfuls of flour, four heaping tablespoonfuls of powdered sugar, one egg, two yolks of eggs (as well as the whole egg), shredded almonds, granulated sugar, cinnamon. Work the butter and powdered sugar to a cream; beat up the yolks and whole egg; add to the ingredients already named. Work in the flour. Incorporate about one teaspoonful of powdered cinnamon to flavor the mixture. Butter and flour a number of small, square-shaped tartlet-pans; fill them with the mixture, and strew over with shredded almonds and granulated sugar. Bake in an oven of moderate heat for about twenty minutes; take out, let cool a little, and turn out onto a sieve to become cold.

**Plain Cake**—One-half cupful of butter, two eggs, two cupfuls of flour, one teaspoonful of vanilla, one cupful of sugar, one-half cupful of milk, one teaspoonful of baking-powder. Bake from thirty to forty minutes. If a plain cake is not desired, add to the dough one cupful (mixed) of chopped raisins and English walnuts, or one square of plain chocolate can be melted and stirred in half the dough, and the two parts baked as marble cake.

**Scalloped Apples**—In the bottom of a buttered baking-dish spread a layer of soft bread-crumbs which have been slightly moistened with butter; cover with a layer of sliced apples and sprinkle with sugar, a dash of nutmeg and the juice and grated rind of a quarter of a lemon. Repeat,



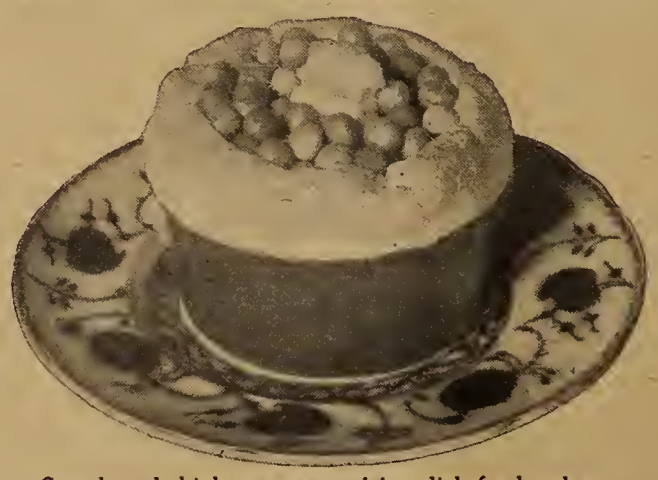
Scalloped apples, an attractive company dessert

cover the top of the dish well with crumbs, and bake forty minutes. Garnish with sections of apple, whipped cream and cherries, and serve hot with sugar and cream. This makes a very delicious dessert, as well as an inexpensive one.

**Meringue**—Much of the success of a meringue depends upon the baking. A meringue requires a slow oven and you must be careful not to take it from the oven until it is thoroughly cooked throughout. (If it is removed before the cooking is accomplished, the eggs will liquefy and the meringue will settle; if cooked too long, the meringue will be tough.)

The whites of eggs usually "come up" better if the eggs are kept in a cold place. I think in these days it is the habit of almost every housekeeper to keep eggs in the ice-box, so perhaps this suggestion is unnecessary. Beat the whites of three eggs until stiff, then add gradually, while beating constantly, four tablespoonfuls of powdered sugar, and beat vigorously two minutes. Cut and fold in three-and-one-half tablespoonfuls of powdered sugar, and add one-half teaspoonful of lemon extract or one third of a teaspoonful of vanilla.

**Smothered Chicken**—Cut nice slices of meat from a cold chicken, trim off all fat and skin, and arrange in small earthen dishes. Pour over a rich sauce made of equal quantities of cream and chicken stock thickened with a spoonful of flour, then partially cover with mashed potato beaten very light with one or two eggs, and set in a moderate oven to brown delicately. As soon as the baking dishes are taken out of the oven, fill the remaining space with hot buttered peas and serve immediately.



Smothered chicken, an appetizing dish for luncheon

**Cherry Pudding**—Two eggs, two teaspoonfuls of baking-powder, one cupful of sweet milk, flour enough to make a stiff batter and as many cherries as can be stirred in. Bake one-half hour. Serve with sugar and cream.

**Soft Molasses Cookies**—Add one-and-three-fourths teaspoonfuls of soda to one cupful of molasses and beat thoroughly; then add one cupful of sour milk, one-half cupful of shortening, (melted lard is all right for those who do not object to its use), two teaspoonfuls of ginger, one teaspoonful of salt and enough pastry-flour once sifted to make the mixture of the right consistency to drop easily from a spoon. Let stand in a cold place until thoroughly chilled. Toss one half the mixture at a time on a slightly floured board and roll lightly to one fourth of an inch in thickness. Shape with a round cutter, which has been dipped in flour, and bake on a buttered sheet in a moderate oven.

**Currant Catsup**—To three quarts of currant juice add three pounds of sugar, one pint of vinegar, one tablespoonful, each, of cinnamon, cloves, pepper and nutmeg. Boil together for twenty minutes, then seal and cork tightly.

**For Preserving-Time**—Fruit for canning should be fresh, firm, and not overripe. If overripe, some of the spores may survive the boiling, then fermentation will take place in a short time. Canning fruit is really preserving sterilized fruit in sterilized, air-tight jars. To sterilize jars, wash and fill with cold water. Set in a kettle on a trivet and surround with cold water. Heat gradually to boiling-point, remove from water, empty, and fill while hot. Put covers in hot water, and let stand five minutes. Dip rubber bands in hot water, but do not allow them to stand. New rubbers should be used each season, and care must be taken that rims of covers are not bent, as jars cannot then be hermetically sealed.

**Sterilized jars** are filled with fruit, and enough syrup added to overflow jars. If there is not sufficient syrup, add boiling water, as jars must be filled to overflow. Introduce a spoon between fruit and jar, that air-bubbles may rise to the top and break; then quickly put on rubbers, and screw on sterilized covers. Let stand until cold, again screw covers, being sure this time that jars are air-tight. While filling jars, place them on a cloth wrung out of hot water.

**Failures in jelly-making** may usually be traced to the use of too ripe fruit. A jelly-bag may be quickly made with a double thickness of cheese-cloth and loops of tape sewed on the top in such a way that it may be hung over a broom-handle or cane.

**To keep jelly** there is no better way than to pour melted paraffin on top after the jelly has hardened, then adjust the covers. The old-fashioned way of cutting letter-paper into circular pieces to just fit the tops of glasses, dipping them in brandy and covering the jelly, putting on tin covers, or circular pieces of paper cut larger than the glasses and fastening securely over the edges with library paste, is always good. Glasses for jelly should be prepared as described above for sterilizing fruit-jars.

**Raspberry Jam**—Pick over, wash and drain raspberries, then weigh. Put an equal weight of sugar into a large dripping-pan, place in oven and heat thoroughly, stirring occasionally. It is desirable to leave the oven door partially open, as the sugar is apt to discolor very quickly. Put a few berries in a preserving-kettle and mash, using a wooden potato-masher, and so continue until all the fruit is used. Add hot sugar gradually, while stirring constantly. Bring to the boiling-point, and let simmer until mixture is quite thick, the time required being from thirty-five to forty-five minutes. The exact time cannot be given, as much depends upon the size of the kettle used, the quantity to be cooked, the surface exposed to the heat, as well as to the fuel used. During the last part of the cooking the jam must be carefully watched, lest it should scorch. Cool and store in small stone crocks, glass jars or tumblers.

**Blackberry Jam**—Pick over, wash and drain blackberries, then weigh. Put a few at a time in preserving-kettle and mash with a wooden potato-masher, and so continue until one half the berries have been used. Heat slowly to the boiling-point, and let simmer fifteen minutes. If the blackberries are not juicy, it may be necessary to add a small quantity of water. Rub through a fine wire strainer, discarding seeds and reserving juice. Mash remaining berries, add juice and sugar (which has been heated in the oven), using same weight of sugar as of berries. Cook and store same as raspberry jam.

**Spiced Currants**—Pick over seven pounds of currants, wash, drain and remove stems. Put in a preserving kettle, add five pounds of brown sugar, two cupfuls of vinegar and three tablespoonfuls each of ground cloves and cinnamon, tied in cheese-cloth. Heat gradually to the boiling-point, and let simmer one-and-one-half hours. Store in a stone jar, and keep in a cool, dry place.

**Currant Jelly**—Both red and white currants are used in equal proportions. Cherry currants are to be preferred when obtainable. For the most satisfactory results the fruit should not be overripe, neither should it be picked directly after a rain. Pick over currants, but do not remove stems; wash and drain. Mash a few in the bottom of a preserving-kettle, using a wooden potato-masher, and so continue until the fruit is used. Bring to the boiling-point, then let simmer very slowly until berries look white. Strain through a coarse strainer, then allow juice to drop through a jelly-bag. Measure liquid, bring to the boiling-point, and let boil five minutes. Add an equal measure of heated sugar, and boil three minutes. Skim and pour into jelly-glasses. Place in the sun, and let stand twenty-four hours, then seal.

Another method of making currant-jelly is to extract juice from currants same as in the previous recipe. Bring to the boiling-point and boil twenty minutes, skimming frequently. Pour into preserving-kettle, add an equal measure of cold sugar, and stir constantly until sugar is fully dissolved. Fill glasses, and set in sun to jell, then seal.

**Raspberry and currant jelly** is usually a success, while raspberries used alone are critical to handle. Use equal parts of raspberries and currants, then follow directions given for making currant jelly. A combination of two-thirds raspberries and one-third tart apples often gives most gratifying results.

**Preserved Gooseberries**—Pick over, wash, drain and stem berries, then weigh. Take three fourths of the weight of the fruit in sugar, put in a preserving-kettle, add one-and-one-fourth cupfuls of water to each pound of sugar, bring to the boiling-point, and let boil fifteen minutes. Add fruit, again bring to the boiling-point, and let boil until the berries are transparent. Fill the jars to overflowing and adjust the covers as directed for other preserves.

# Letters From a Country Sister

## Labor-Saving Devices That Count

DEAR MARTHA: A woman called at my house to-day and succeeded in making me very impatient with my sex. It is no wonder so little progress has been made in housekeeping, and I'm not at all surprised that so many women are following the traditions of their grandmothers in regard to cooking and other work around the house. Too many are like my caller, opposed to new things, and prefer to keep on in the same old way rather than take time to adopt new methods. But let me tell you about my caller—she is just like many other good women, sensible about most things, excepting themselves and their work. I had been telling this woman about the advantages of a fireless cooker, and after I had explained the method of using it, quite fully I thought, she settled back in her chair with a sort of resigned look on her face and said:

"Oh, well, I guess I'll keep to my old wood-stove. I've been using it so long that I'm almost too old to change now."

Martha, I could have shaken that woman and any other who talks about being too old to learn how to make work lighter and life easier. That is just the trouble with us country women. We get into a rut and stay there so long, and wear it so deep that the sides of the rut reach high enough after a while to cover us over so we cannot see out—become blind to opportunity for improvement. When that happens, and it often does, the case of the farm woman is pitiable indeed.

We have enough to do, dear knows, under the best of circumstances, but that very fact should make us welcome eagerly anything that will give us more leisure and remove the element of drudgery from housekeeping on the farm.

Oh, yes, I know there are various labor-saving devices recommended to housekeepers that are not worth the space they occupy in the kitchen and are more work to operate than the task itself, twice over. But a fireless cooker is not one of these doubtful things. As I told you, I included a fireless cooker in my budget when I decided to get certain mechanical helpers and do without a girl. I bought a small but good one—a single compartment in which I can bake, roast or steam. For most families I would recommend a two or three compartment cooker, but I manage very well with mine. And what a comfort it has been to me!

No doubt you are familiar with the "hay box" which was brought into use several years ago, and understand the principle of it. Just a receptacle made of a box or pail and lined with some material that is a non-conductor of heat. When food that is to be cooked has reached the boiling-point throughout, it is quickly transferred from the stove to the cooker and covered tightly to exclude the air and confine the heat. In this manner the temperature is maintained at the boiling-point for a long time, and the cooking process continues for hours. The "hay box" or home-made cooker is perfectly satisfactory for all kinds of food that are to be steamed, such as cereals, stews, beans, fricassees, etc., but it is a great advantage to be able to roast and bake as well, and this cannot be done in the ordinary home-made cooker. To do this requires a metal-lined affair and plates of stone or metal that may be subjected to a very high degree of heat and permit of baking and roasting.

I'll not forget Hiram's surprise and interest when I set before him the first roast of beef that I had cooked in my "fireless." He had been rather skeptical about it and shook his head rather doubtfully when I told him at breakfast I meant to roast the meat for his dinner in it. He said under his breath something that sounded like "Better have some hash ready, in case the roast is not done." But it was done, deliciously, too——juicy, tender and well-flavored. To prepare it, I treated it much as I would for an oven roast. First, wiped it with a clean, damp cloth; sprinkled it lightly with flour and pepper, and, just as I placed it in the cooker, salted it. The plates were heated until they were as hot as a flatiron that is right for a damask table-cloth. One was placed in the bottom of the cooker, then the kettle containing the roast was set on it, the second plate, as hot as the first, placed in a rack on top and the cover of the cooker clamped down. This was all done quickly so the stones would have no opportunity to cool, and that was all there was to it. Allowing seventeen minutes for each pound of meat, at the end of the required time the cooker was opened, the roast taken out and the gravy made in the usual way.

I roast chickens in the same way, bake bread, pies and cake, and I have found that angel-food cakes are better—more tender and delicious—baked in the fireless than when baked in the range oven.

But the fireless cooker is like most new things, it must be given a chance, tried until one becomes thoroughly acquainted with it. Lots of women say they have no success with cooking in this new way, when the real truth of the matter is they do not follow directions, and won't go an inch out of the old beaten way when the old way is not exactly suited to the new method.

Next year I mean to ask Hiram for the amount of a girl's wages for six months. He'll give it to me, I'm sure, for he often speaks of the good investment we made when we spent that $260 for household appliances. A good investment because I have been able to do my work ever since without wearing myself out. What am I to include in my next budget? Nothing less than a housemaid, one to sweep and dust for me, clean rugs, curtains, walls, etc., and that important helper will be a vacuum cleaner, one that can be operated by the gasolene-engine. I might have had a small one last year—one that works by hand—but, useful as they are, they take more strength to operate than I can spare, and I can't always count on Hiram's help when cleaning-day comes. We are not rich, Martha, I have merely learned how to spend money in places where it will give the largest returns, and Hiram has learned that it is but fair to share with me the money expended each year for improvements.

Your Country Sister

# Answers to Sam Loyd's Puzzles

## March 25th

### Answer to Pictorial Charade

Pot-he-carries weight.

### Answer to Charade on Two Words

Current, currant.

### Answer to Square Word

| | | | |
|---|---|---|---|
| P | O | S | T |
| O | D | O | R |
| S | O | D | A |
| T | R | A | P |

### Going Into Business

Artist, puzzlist, chef, doctor, sexton, actor, burglar, dentist, broker, teacher, banker, mason, barber, butcher, brakeman, grocer, glazier, chemist, dyer, beggar, gunsmith, farm-hand, poet, tramp, editor, driver, plumber, grainer, painter, general, laborer, tailor, merchant, tinker, carpenter, potter, singer, chauffer and mate.

### Roman Subtractions

Texas, crow, calm, more, team, apex, revel, medal, colon, curve, live, placid, vague, lever, are the words which, subtracted from, leave other words as follows:

Teas, row, alm, ore, tea, ape, reel, meal, coon, cure, lie, plaid, ague, leer.

### One-Word Puzzle

The word head.

### A Charade

Earnest.

### Somewhat Mathematical

Bought eleven horses at $37.00 and fifteen cows at $23.00.

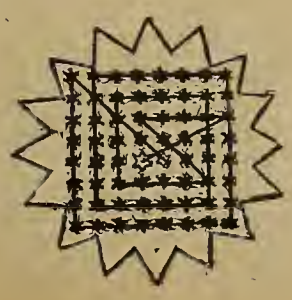
### Astronomical Puzzle

The Astronomical Puzzle solves by fourteen straight lines. (See drawing.)

## April 25th

### Puzzling Treatise

Fir, apricot, cherry, yew, poplar, ash, pear, date, cork, cinnamon, linden, quince, cypress, holly, fig, gum, elder, peach, banana, birch, orange, bread, hazel, hickory, hemlock, apple, lime, maple. oak, camphor.



### Puzzle of the Iceman

Solstice, avarice or artifice, notice, office, edifice, malice, service, choice or prejudice, office, practice, poultice, justice, cornice, lattice, accomplice, vice, dice, rice, surplice, mice, juice, pumice, coppice, splice, dentrifice, bodice, price, suffice, caprice, police, advice, device, crevice, precipice.


# Something For Nothing

ONCE in a while somebody gets something for nothing.

But *somebody* has to pay.

An extraordinary and interesting case is fully reported in the July AMERICAN MAGAZINE. It is the story of how a great concern has succeeded in getting its goods manufactured in our prisons at an average wage of 34 cents a day for convict labor. 34 cents a day does not pay anywhere near the cost to the state of feeding, housing and caring for the prisoners who spend their time making chairs for this concern at the low wage mentioned. In five states where this is going on, taxpayers meet a total loss of $108,000 a year. That is, $108,000 is the difference between what the states receive for the labor of the convicts so employed, and what it costs the states to take care of them. The states are: Indiana, Kentucky, Illinois, Wisconsin and Connecticut. These prisoners could earn more, either for the state or for the benefit of poor and suffering wives and children whom they have left behind them, outside the prison.

Is it right? We don't think so, and this article we believe will raise a disturbance in at least five states in a good cause.

"Boss" Cox of Cincinnati is one of those interested in the concern which is getting something for nothing out of this thing.

THE AMERICAN MAGAZINE is the kind of a magazine in which a subscriber can find every month great pieces of important national journalism like the one referred to. The author of this article has worked for a year or more on his report. Facts, dependable facts, are what THE AMERICAN MAGAZINE wants and gets.

THE JULY number of THE AMERICAN MAGAZINE also contains a report of some remarkable results obtained by parents in the education of children. One case is that of the children of the Rev. A. A. Berle of Cambridge, Mass., who have unusual records. One at 16 is a sophomore in Radcliffe, another at 15 is a sophomore in Harvard, another at 9 is in the High School. The progress of these children is attributed to certain ideas of their father which are set forth in the article. Another wonderful case fully reported is that of a son of Professor Wiener of Harvard, who graduated from college at 14, and is now studying for the Ph. D. degree, which he will undoubtedly gain at an age when most boys are starting for college. Still another amazing case fully explained is that of a youngster who at 9 speaks five languages.

The article is full of wonder, but it is more than that. It contains many suggestions which can be applied in thousands of homes.

IN THE same issue of THE AMERICAN MAGAZINE, the July issue, there is an unusual amount of notable fiction. Some of these contributions are: a ghost story by Samuel Hopkins Adams; a Phœbe and Ernest story by Inez Haynes Gillmore; an adventure story by William J. Locke, author of "Simple Septimus" and "The Beloved Vagabond," and a story by Edna Ferber, a young writer with a gift for story-telling much like that of the late O. Henry. Many other stories are in the number, together with beautiful pictures and three great original departments created by THE AMERICAN MAGAZINE—"The Interpreter's House," "Interesting People," and "The Pilgrim's Scrip."

We will send THE AMERICAN MAGAZINE to any FARM AND FIRESIDE reader for a year for $1.50, and the WOMAN'S HOME COMPANION for a year for $1.50. We will send both THE AMERICAN MAGAZINE and WOMAN'S HOME COMPANION, each for a whole year, for the special price of $2.20.

THE AMERICAN MAGAZINE

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*With Patented* GLASS DOOR
**on *your* stove or range, either oil, gasoline, acetylene, alcohol or gas.**
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is *guaranteed* not to break from heat because it is secured by our patented *yielding pressure* retaining strips, which permit expansion and contraction. Glass door fits snugly in one-piece beaded front, and is held tightly in place with two turnbuckles, preventing escape of heat.
Baking qualities and ventilation superior to any other oven or range. All heat goes right into the open bottom, and is perfectly distributed to all parts of the oven by means of our patented Heat Deflector. Flame always visible through small mica windows. With the **BOSS** a baking costs *less than a cent.* It will many times over *pay for itself* in saved bakings to say nothing of saved fuel.
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**FREE:** Our valuable Recipe Book, containing many cookery helps and full description of BOSS Ovens sent FREE on receipt of postal, plainly written, giving your own and your dealer's names and addresses.

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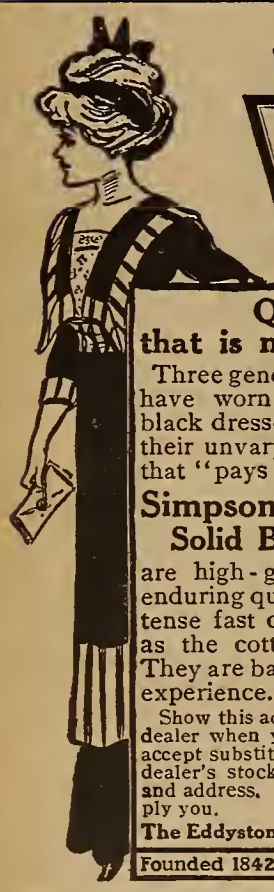

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Three generations of women have worn these beautiful black dress-goods because of their unvarying high quality that "pays to make up."
**Simpson - Eddystone Solid Black Prints**
are high-grade calicoes of enduring quality; and the intense fast color is as lasting as the cotton fabric itself. They are backed by 68 years' experience.
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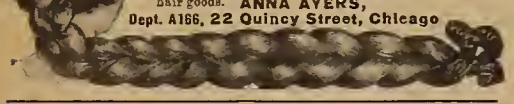
**$2 Hair Switch Sent on Approval.** Choice of Natural wavy or straight hair. Send a lock of your hair, and we will mail a 22 inch short stem fine human hair switch to match. If you find it a big bargain remit $2 in ten days, or sell 3 and EARN YOUR OWN SWITCH. Extra shades a little more. Inclose 5c postage.
Free beauty book showing latest style of hair dressing—also high grade switches, pompadours, wigs, puffs, etc. Women wanted to sell our hair goods. **ANNA AYERS,**
**Dept. A166, 22 Quincy Street, Chicago**



# OUR YOUNG FOLKS

## The Hero of Sugar-Loaf Mountain

By Mary Minor Lewis

THE sun was setting behind Sugar-Loaf Mountain. The valley was already filled with purple shadows. Only the drowsy chirp of insects in the dewy grass broke the silence.

A gaunt mountain woman, with a thin, drawn face and a shabby shawl about her shoulders, shaded her eyes with her hand and gazed across the valley to where the trail led down the mountain-side from the Columbus mine. She was looking for her boy, who, since his father's death, was her sole support. She sighed wearily and turned to reënter the house.

A sleepy youngster, about three years old, stood in the doorway.

The woman took him in her arms. With tender words and kisses, she ascended the stairs and tucked him into his little white bed in the corner of the room, crooning softly until he fell asleep.

A girl of about twelve sat by the western window, straining her eyes to finish a fairy-story by the fading light.

Glancing at the bed in which the little boy slept, the woman rose from the bedside and, with her finger on her lips, signaled the girl to follow her.

They walked in silence to the front gate. Again the mother's anxious eyes turned to where the trail wound down the mountain-side.

But there was no one coming down the path, and suddenly the peaceful summer night seemed filled with terrors!

"Meta," said the woman, as she turned an ashen face to her daughter, "something has happened to John!"

The girl stifled a cry.

"His work may have kept him, mother," said she, trying to comfort her. But they looked into each other's faces, each reading in the eyes of the other a nameless dread!

The boy, John Allison, was employed as a driver in No. 10 Colliery of the Columbus mine. Though only fourteen years old, he did the work of a man, being at his post from seven in the morning until six in the evening. And every day, at sunset, his mother, who idolized her brave-hearted boy, stood at the gate of their little home and watched to see him come down the trail on the side of Sugar-Loaf Mountain. At a certain point he always loosened the red handkerchief which he wore at his throat and waved it to her! And she had come to watch for this signal with a thrill of pride and joy, as a soldier might to see his beloved colors rippling, triumphant, on the breeze; as a sailor might who sees the Stars and Stripes fluttering down from the mast-head with the sound of the sunset gun.

But to-night she had waited in vain for his signal; had listened, until her ears ached for the sound of his returning step.

Mrs. Allison and Meta turned back into the house and silently went about the preparation of the evening meal, their hearts too full for words.

Presently there was a sound of running feet, the slam of the gate, and a wild-eyed woman, whose husband also worked in No. 10 Colliery, rushed into the room! She was gasping for breath. Her black hair blew in wisps about her colorless face. She staggered as if dazed, and frantically clutched at a chair for support.

"The mine!" she shrieked. "The mine has caved in!"

John's mother stood for a moment like one turned to stone.

"Meta," she said to the terrified little girl, who clung, sobbing, to her skirts, "stay here with Baby. Do not leave him day or night. I trust you to take care of him till I—bring John home." Her voice broke on the last words. Then she beckoned to the woman, who sat moaning and wringing her hands.

"Come!" she cried, "to the mine! They may yet be saved!"

And together the two women rushed wildly through the darkness, stumbling, falling, but pushing blindly on through the valley and up the trail to the mine.

Inside of No. 10, at about five o'clock, John Allison, busy unharnessing his mule for the day, was startled by hearing a clod fall from the roof close by him. He looked up quickly. The props suddenly commenced cracking! Large boulders of coal burst from the walls with a horrible, grinding sound!

Farther in the mine, within a high vaulted chamber, seven men were still at their work. The noise of their picks made them deaf to the crumbling of the walls in the section where John was.

The boy was out of harm's way, but he remembered the men. Between him and them was the roof, threatening to fall at any moment, and if it fell before they could escape from that chamber, they would be shut into a living tomb where no help could reach them! The boy hesitated one moment while a vision of home—his mother's tired, patient face; his sister, and the golden-haired baby—flitted before him. They would be left to suffer if he lost his life.

Should he leave the miners to their fate and save himself?

Every moment was precious. With a half-smothered cry upon his lips, with a wordless prayer in his heart, the brave boy sped along the gangway, through the crackling coal and beneath the crumbling roof of earth until he reached the men.

"Run for your lives!" he cried. "Run for your lives! The mine is caving in!"

One glance at the boy's death-white face, and the miners realized their peril. Throwing aside their picks, they rushed madly toward the chamber which John had just left.

There was an ominous roar, a strong gust of wind, a sense of suffocation and despair, and every light went out!

The dreaded "cave-in" had occurred! The men groped about, calling to each other. One of them found matches in his pocket and made a light. They counted, and found that all were safe and uninjured, but realized that they were imprisoned. The crumbling walls and roof had completely closed the passage-way leading out of the mine, through which John had hoped they might all have escaped.

It looked as though a slow and horrible death from thirst and starvation awaited them; for so tremendous was the heap of earth, coal and rock which closed the mine's entrance that days must pass before help could reach them from outside.

"A little food is left in the dinner-pails," said one of the men, "and the keg of water is safe. Let us be thankful and begin to work!"

With one consent they gathered together such tools as could be found and began to dig themselves out.

When Mrs. Allison and the woman who had brought the news of the disaster reached the mouth of the mine, work had already been begun. Men, boys, even women and young girls, lent willing hands. Everywhere one heard sobs and prayers.

Help came from the nearest village during the night, and a large force of men were kept constantly at work.

At sunset of the third day those engaged in the work of rescue heard the moans of the entombed men and fell to their work with renewed zeal. And the prisoners raised themselves where they lay in their weakness and crawled toward the blessed sound of the picks! A few hours more and the sound of human voices reached them; another short period of waiting and a light streamed into the darkness of their living grave.

Then friends climbed through the opening and carried the perishing miners gently out into the cool, fresh air, and streached them out on the sweet grass beneath the stars.

Stimulants and food were given and all were soon revived.

As the cheering men and sobbing women crowded around, wringing each other's hands and expressing in broken words their gratitude, one of the miners told how John Allison had risked his life to save them. For a moment a great silence fell upon the rough crowd, then a cheer rose for the brave boy which made the rocky mountain-side echo again and again!

And his mother, her proud heart fairly bursting, with joy and thankfulness, heard him called by a name which will cling to him to his dying day, "The Hero of Sugar-Loaf Mountain."

"'Meta,' said the woman, 'something has happened to John!'"

## The Letter-Box

DEAR COUSIN SALLY—

When I read your letter about the votes on "My Favorite Hero," I was surprised and shocked to think that the first and bravest hero whose life-work was given to discovering our dear home land, and who died without glory or honor, should receive one vote. One vote! Think of it!

I wonder if the writers and club-members really think of the fact that Columbus was the only person, not only of the civilized world, but of the whole globe, who dared venture on the unknown sea in those times. True, others came over and did their works for the advancement of our country, but the bare fact remains that Columbus plowed the path through the briny waves on which, later, men trod their way to become heroes of American history.

I hope the club-members are not guided in their opinions by the fame, glory and honor tendered them, but by deep facts of history and truth which, to me, center and close around our first hero, Christopher Columbus! Your cousin,

FLORENCE STEFFY,
Dover, Delaware.

## Cousin Sally's Club

WHY don't *you* join our club and learn the secret of our monogram? The club button costs five cents and you are sure to like it. A picture of it is given at top of page. If you are not older than seventeen you are eligible for membership. When joining, state age, and address Cousin Sally's Club, FARM AND FIRESIDE, 381 Fourth Avenue, New York.

## Our Bulletin Board

The names of the lucky boys and girls in the April 10th story contest are:

*Girls*—First prize, Lucille Skilton, age sixteen, Ravenna, Ohio; second prize, Pansy Irene Douglas, age twelve, Pendleton, Indiana.

*Boys*—First prize, Ellis Glendenning, age twelve, Gibson City, Illinois; second prize, Howard E. Fuller, age sixteen, Loxley, Alabama.

For the next best five stories, prizes are awarded to Edna Tallman, age fourteen; Bessie V. Chamberlain, age thirteen; M. Evelyn Bisbee, age thirteen; Roy Miller, age eleven; Florence E. Steffy, age fifteen; Ruth Sylvia, age eleven.

Prizes for the best colored picture of the illustration of the two boys are awarded to:

*Girls*—Florence B. Kirk, age eight; Mildred Hample, age ten; Mildred Ballenger, age seven; Frances Fengel, age eleven.

*Boys*—Lawrence E. Webster, age seven; Forrest C. Sine, age six; James Posten, age eight; Norris M. Hardisty, age seven.

Estelle Garbee, of Sunny Virginia, made over six dollars last summer selling berries from her own strawberry-patch. Good for Estelle!

John Williams, of Florida, is an expert swimmer. He believes every boy and girl should know how to swim. So he is teaching some of the boys in his neighborhood. Bravo for Williams!

Several of our boys and girls are devoting much of their spare time to raising chickens. Here's a suggestion for *you* and *you* and *you* who are anxious to make a little pin-money! Read our splendid Poultry Department and then get busy! Remember, our editor is always glad to send suggestions to ambitious boys and girls.

## Cousin Sally's Letter

DEAR GIRLS AND BOYS—

I wish sometimes that I could send you all a personal note, for I want to tell you how very much I appreciate your dear messages. But when I tell you that some days I receive as many as four hundred letters, you will know how very impossible this would be. So I try to make my letter to you here personal. I mean it for *you* and *you* and *you,* dear little reader, and I want you to feel when you drop your letter in the mail-box that it is going to someone who will appreciate and welcome it. You are all so good about writing to me. I have noticed that many of you do not wait for an answer from me. You just keep on writing, and I can't help but feel grateful for such generous consideration. I read and enjoy every letter that is sent to me, and if there were space, I would print all of them. If our editor came to me to-day and said, "Cousin Sally, you may have every page in FARM AND FIRESIDE this issue for the children's work," I know even then there would not be enough room for all your letters. So I publish the ones which I think are of general interest.

If you want to get a mention on "Our Bulletin Board," send me an interesting letter. Tell me any interesting history about your home town, speak about your particular "hobby" if you have one, tell how you are spending your vacation; in fact, anything that you think would be of general interest, and I'll try to find a place for it. First choice will be given to the letters first received.

Now please write to me soon, for your letters are always welcomely received by

Yours ever faithfully, COUSIN SALLY.

# Designs for Summer Clothes

## With Practical Patterns for the Home Woman

By Miss Gould

No. 1779—Tucked Waist Buttoned in Front

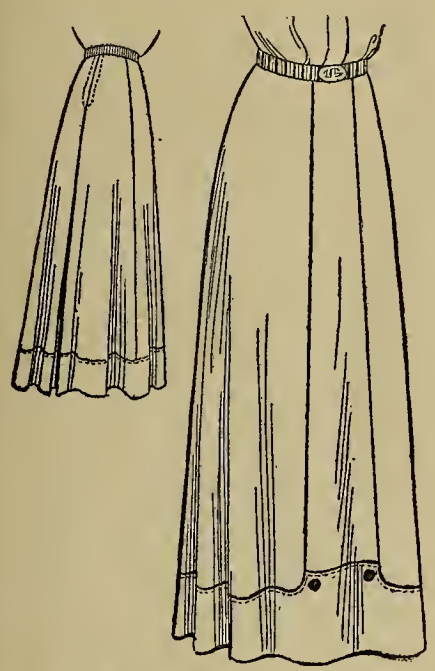
Pattern cut for 32, 34, 36 and 38 inch bust measures. Material required for medium size, or 36-inch bust, two-and-one-fourth yards of thirty-six-inch material, with five-eighths yard of contrasting material for bands

No. 1428—Belted Kimono, High or Low Neck

Pattern cut for 32, 34, 36, 38, 40 and 42 inch bust measures. Quantity of material required for sacques in either style in medium size, or 36-inch bust, three-and-one-half yards of twenty-seven-inch material, or two-and-one-fourth yards of thirty-six-inch material

No. 1776—Blouse with Side Closing

Pattern cut for 32, 34, 36, 38, 40 and 42 inch bust measures. Quantity of material required for 36-inch bust, two-and-three-fourths yards of twenty-two-inch material, with one half of a yard of contrasting material thirty-six inches wide for the trimming



No. 1550—Outing Skirt with Facing

Pattern cut for 22, 24, 26, 28 and 30 inch waist measures. Material required for medium size, or 26-inch waist, seven-and-one-half yards of twenty-four-inch material, or five yards of thirty-six-inch material

### How to Get the Patterns

If you want clothes for your summer wardrobe that are right in style and yet practical, use the patterns which are illustrated in FARM AND FIRESIDE. These are the famous WOMAN'S HOME COMPANION patterns which we supply at the low price of ten cents each.

So great has been the demand among FARM AND FIRESIDE readers for our WOMAN'S HOME COMPANION patterns that we have established three offices or depots from which these patterns can be obtained, as follows:

Eastern depot: FARM AND FIRESIDE, 381 Fourth Avenue, New York.

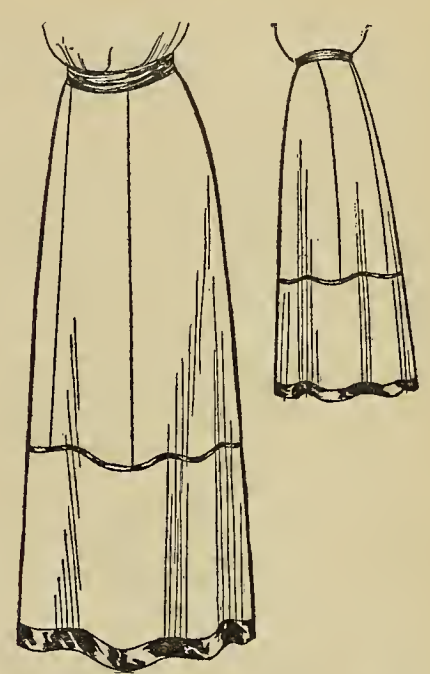
Central depot: FARM AND FIRESIDE, Springfield, Ohio.

Western depot: FARM AND FIRESIDE, 1538 California Street, Denver, Colorado.

We suggest that you send your order to the depot that is nearest to you to facilitate the quick delivery of the pattern.

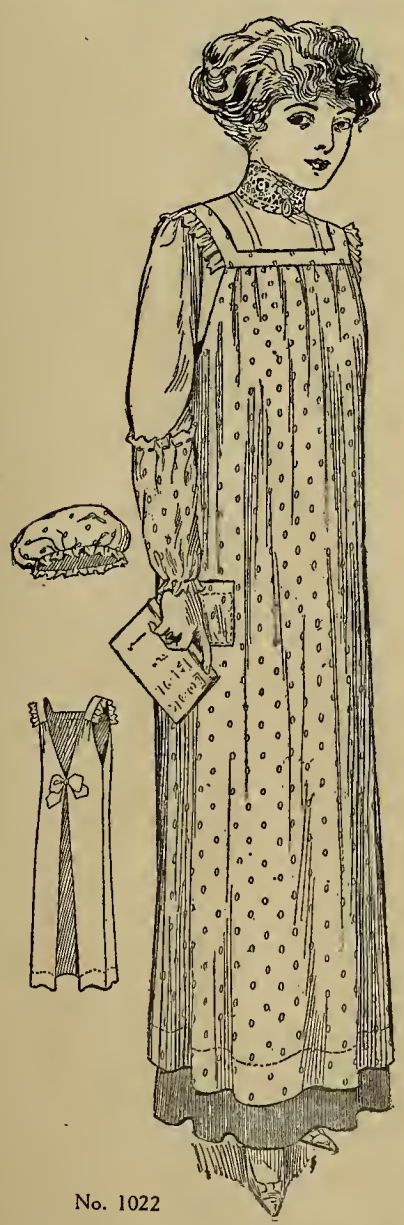
### A Premium Offer

To any FARM AND FIRESIDE reader who sends us one new subscription to FARM AND FIRESIDE with fifty cents for the same, we will give as a premium for the subscription one WOMAN'S HOME COMPANION pattern. To obtain a pattern without cost, send the subscription to FARM AND FIRESIDE, Springfield, Ohio.



No. 1752—Gored Skirt with Scant Flounce

Pattern cut for 22, 24, 26, 28 and 30 inch waist measures. Material required for medium size, or 26-inch waist, five-and-one-half yards of twenty-two-inch material, or four yards of thirty-six-inch material



No. 1022

No. 1022—Work-Apron with Cuffs and Cap

Pattern cut in one size only—medium, or 36-inch bust. Material required, three-and-one-fourth yards of twenty-seven-inch material

No. 1319

No. 1319—House Dress in Princesse Style

Cut for 32, 34, 36, 38, 40 and 42 inch bust measures. Quantity of material for 36-inch bust, nine yards of twenty-six-inch material

No. 1792
No. 1793

No. 1792—Waist with Deep Collar

Cut for 32, 34, 36, 38 and 40 inch bust. Material for 36-inch bust, one-and-three-fourths yards of thirty-six-inch, with one-half yard of lace and three fourths of a yard of contrasting material for the trimming

No. 1793—Gored Skirt with Plaited Band

Cut for 22, 24, 26, 28 and 30 inch waist. Material for 26-inch waist, two-and-three-fourths yards of thirty-six-inch material, with one-and-three-fourths yards of contrasting material

No. 1568

No. 1568—Tucked Wrapper in Two Styles

Cut for 32, 34, 36, 38, 40 and 42 inch bust. Material required for 36-inch bust, seven-and-three-fourths yards of thirty-six-inch material

No. 1179

No. 1179—Princesse Apron

Pattern cut for 32, 36 and 40 inch bust measures. Material required for 36-inch bust, four-and-one-half yards of thirty-six-inch material

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# Just for Fun

### News to Her

ARE you not glad to set foot on terra firma?" asked a lady of an old friend who had just landed from an American liner.

"Terra firma?" was the response. "Dear me! I thought this was Queenstown!"—Tit-Bits.

### A Man To Be Pitied

"DO YOU enjoy your meals, old man?"

"Do I enjoy my meals?" snorted the indignant dyspeptic. "My meals are merely guide-posts to take medicine before and after."—Brooklyn Life.

### A Problem

TO LIVE by rule seems nice, I say;
It must be wondrous bliss;
But how can mortal do it, pray,
this? life's all mixed When like
—Lippincott's.

### The Comic Artist's Work

CUSTOMER—"Got any funny pictures to amuse this small boy?"

BOOK-SELLER—"Yes, sir. Here is the latest style-book."—J. M. Hendrickson.

### For All Time

MRS. HIGHUPP—"The judge decreed that they should be separated, never to see each other again."

MRS. BLASÉ—"Are they?"

MRS. HIGHUPP—"Yes. They are living next door to each other in a New York apartment-house now."—Puck.

### Weighty Decision

"DID you make those biscuits, my dear?" asked the young husband.

"Yes, darling."

"Well, I'd rather you would not make any more, sweetheart."

"Why not, my love?"

"Because, angel mine, you are too light for such heavy work."—The People's Popular Monthly.

### Simple

TEACHER (of English class)—"Johnny, please give the plural of tomato."

JOHNNY (very promptly)—"Ketchup."—B. G. C.

### A Hair-Dresser's Version

A WOMAN'S crowning glory is her puffs, braids, switches, pompadours, chignons, Psyche knots, clusters, nets, rolls, rats and Billie Burke curls.—James W. Babcock.

### Not So Far Wrong

JAMES was halting and stammering through his Latin translation, and Miss Graham was deftly trying to stimulate that none too brilliant student's memory. *Sinister* was the word she wanted.

"Come, come, James," she urged. "Just think hard. You know the Latin for 'left.' Now what is it?"

James did as directed, and thought hard for a moment. Then he looked up triumphantly.

"Spinster," he announced.—Harriette Wilbur.

### A Misapplied Diminutive

THE late Bishop William N. McVickar, of Rhode Island, harbored a large soul in a body to match. He was a bachelor, whose sister kept house for him.

On one occasion he telephoned to his tailor that he wished to have a pair of trousers pressed, and the tailor immediately sent a boy to the bishop's residence to get them.

The bishop's sister admitted the messenger, and called up-stairs, "Willie, the boy has come for your trousers!"

When her brother appeared, the youth's astonished gaze traversed the prelate's impressive "corporosity," then he murmured:

"Gee! Is that Willie?"—Youth's Companion.

### Her Suspicion

HE (soulfully)—"There are a thousand stars to-night looking down upon you."

SHE—"Is my hat on straight."—Harper's Bazar.

### Fault of the Weather

"I SAY, old man, you've never returned that umbrella I lent you last week."

"Hang it all, old man, be reasonable; it's been raining ever since."—Punch.

### Sad Outlook

MISTRESS—"I'm sorry you are going to leave, Marie. Are you going to better yourself?"

MARIE—"No, ma'am. I'm going to get married."—Chicago News.

### The Cautious Tongue

SINGING TEACHER—"Now, children, give us 'Little Drops of Water' and put some spirit in it."

PRINCIPAL (whispering)—"Careful, sir. This is a temperance school. Say 'put some ginger in it.'"—J. Collins.

### Tit for Tat

"DEAR Clara," wrote the young man, "pardon me, but I'm getting so forgetful. I proposed to you last night, but really forgot whether you said yes or no."

"Dear Will," she replied by note, "so glad to hear from you. I know I said 'no' to someone last night, but I had forgotten just who it was."—London Opinion.

### An Early Call Desirable

"Oh, gracious, there goes a gallon of ice-cream to the Smiths'. I wonder if we haven't got something of theirs that mother'd like to have me take back!"

### Tying It Up

KENNETH was trying to write "tree." He succeeded in making the first two letters, but could not remember the "ee." Russell was asked to help him and said, "Kenneth, just pull out that line and tie two knots in it."—Mrs. J. W. Gregg.

### A Cruel Difference

FROST—"What's the difference between a débutante and a suffragette?"

SNOW—"About twenty years."—Henry Miller.

### Misdirected Energy

THE motorist emerged from beneath the car and struggled for breath. His helpful friend, holding the oil-can, beamed upon him.

"I've just given the cylinder a thorough oiling, Dick, old man," said the helpful friend.

"Cylinder," said the motorist, heatedly, "that wasn't the cylinder; it was my ear!"—Tit-Bits.

### Taking Him Up

POLICEMAN—"You've been begging. Now you just accompany me."

ORGAN-GRINDER—"With pleasure, sir. What song would you like?"—Pele Mele.

### Playing the Part

THE storekeeper at Yount, Idaho, tells the following tale of Ole Olson, who later became the little town's mayor.

"One night, just before closin'-up time, Ole, hatless, coatless and breathless, come rushin' into the store, and droppin' on his knees yelled, 'Yon, Yon, hide me, hide me! Ye sheriff's after me!'

"'I've no place to hide you here, Ole!' said I.

"'You moost, you moost!' screamed Ole.

"'Crawl into that gunny-sack then,' said I.

"He'd no more'n gotten hid when in runs the sheriff.

"'Seen Ole?' said he.

"'Don't see him here,' said I, without lyin'.

"Then the sheriff went a-nosin' 'round an' pretty soon he spotted the gunny-sack over in the corner.

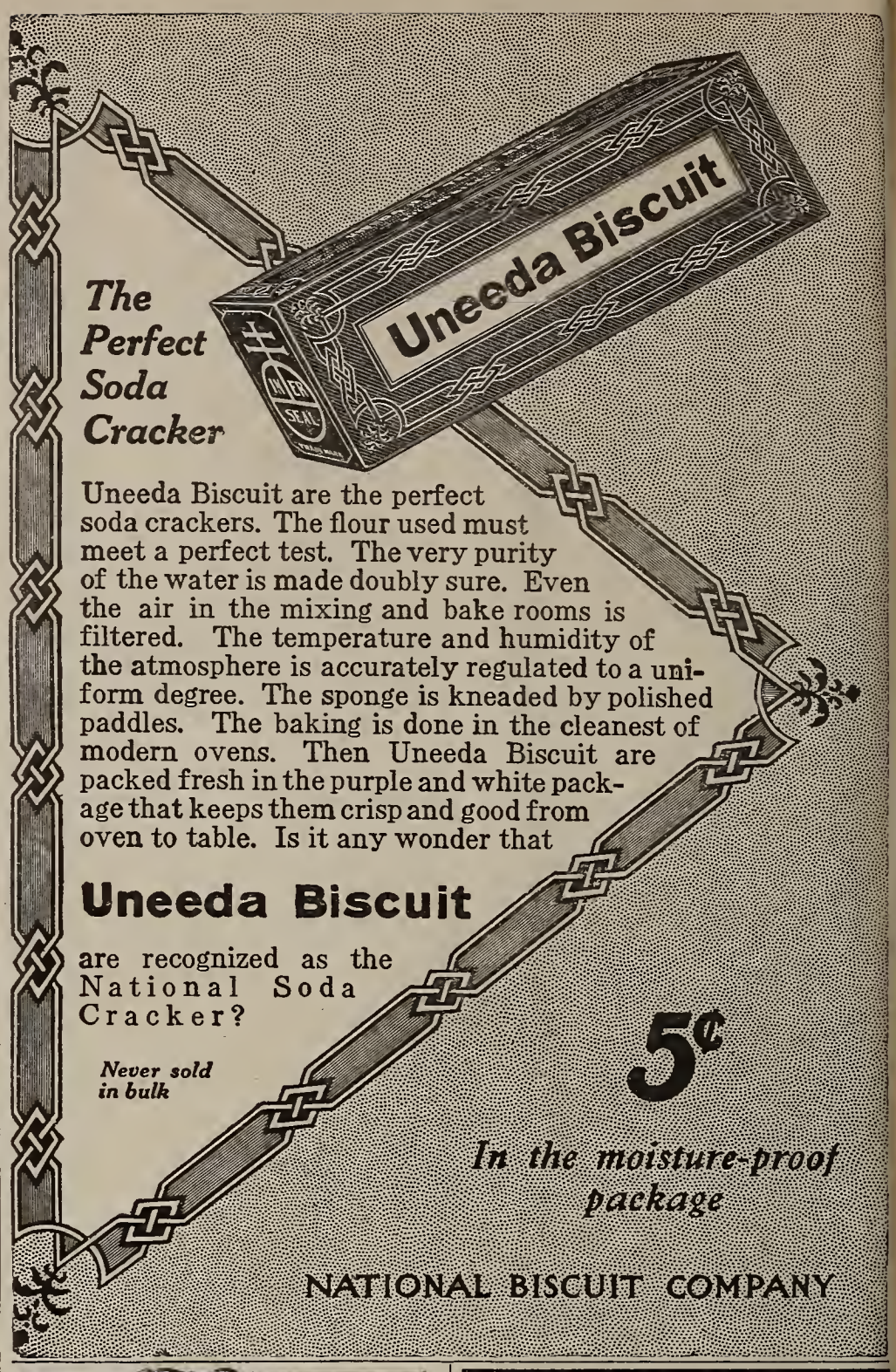
"'What's in here?' said he.

"'Oh, just some old harness and sleigh-bells,' said I.

"With that he gives it an awful boot.

"'Yingle, yingle, yingle!' moaned Ole."—Everybody's.

Brother—"Well, did you join the college secret society?"
Sister—"Yes, and I'm sorry I did. I don't think much of their old secret."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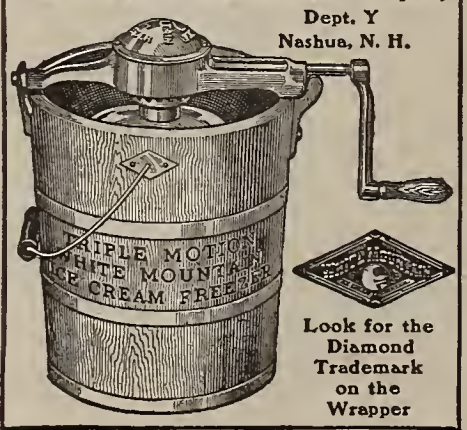


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